

=> fil reg  
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STRUCTURE FILE UPDATES: 26 SEP 2005 HIGHEST RN 863963-04-6  
DICTIONARY FILE UPDATES: 26 SEP 2005 HIGHEST RN 863963-04-6

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TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when  
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\*\*\*\*\*  
\*  
\* The CA roles and document type information have been removed from \*  
\* the IDE default display format and the ED field has been added, \*  
\* effective March 20, 2005. A new display format, IDERL, is now \*  
\* available and contains the CA role and document type information. \*  
\*  
\*\*\*\*\*

Structure search iteration limits have been increased. See HELP SLIMITS  
for details.

Experimental and calculated property data are now available. For more  
information enter HELP PROP at an arrow prompt in the file or refer  
to the file summary sheet on the web at:

<http://www.cas.org/ONLINE/DBSS/registryss.html>

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L25 ANSWER 1 OF 23 REGISTRY COPYRIGHT 2005 ACS on STN  
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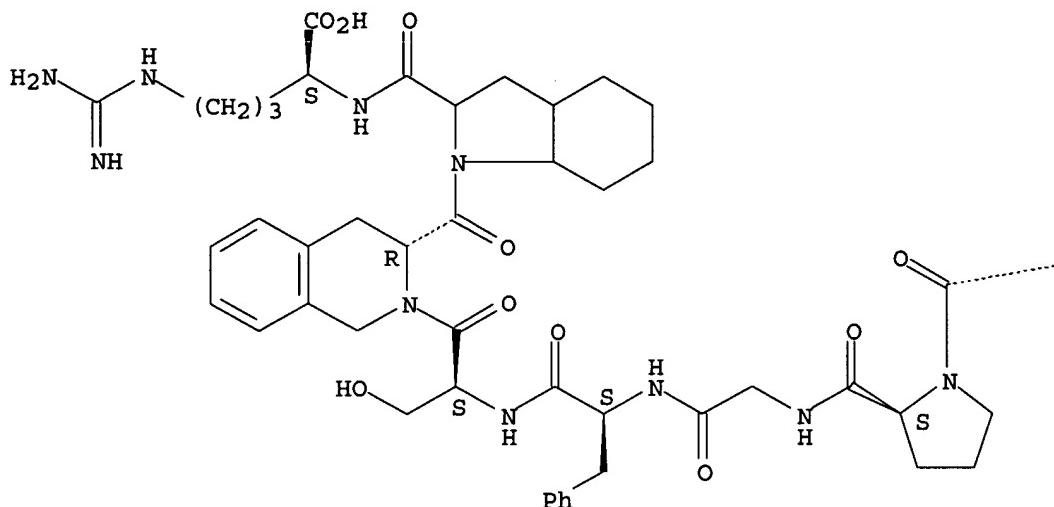
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DT.CA CAplus document type: Patent

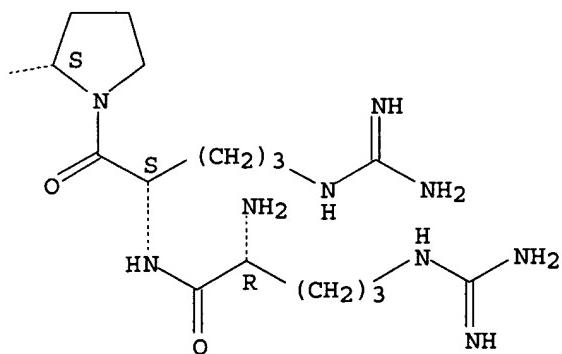
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)

Absolute stereochemistry.

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PAGE 1-B



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:185137

L25 ANSWER 2 OF 23 REGISTRY COPYRIGHT 2005 ACS on STN  
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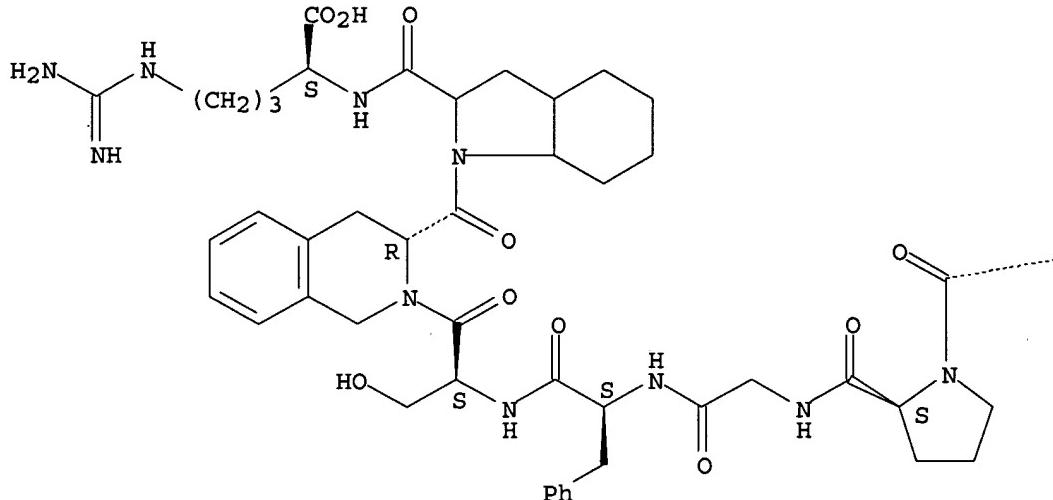
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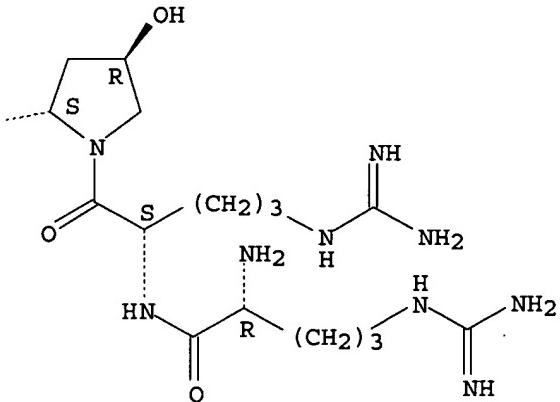
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)

Absolute stereochemistry.

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\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:185137

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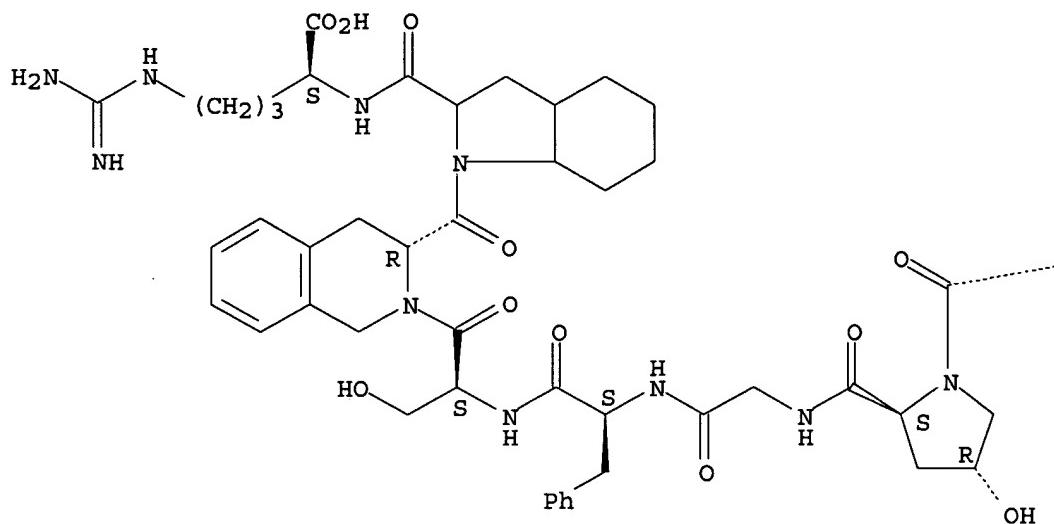
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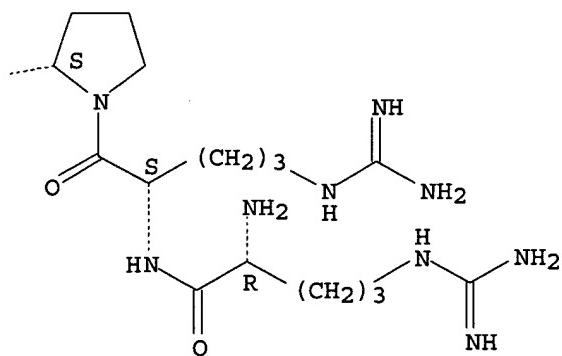
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 RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)

Absolute stereochemistry.

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\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:185137

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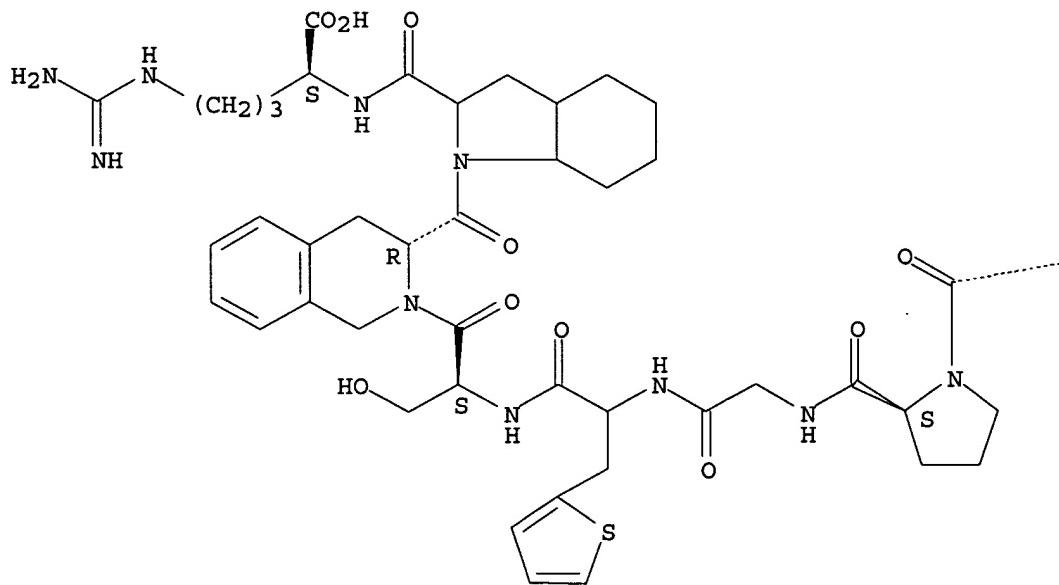
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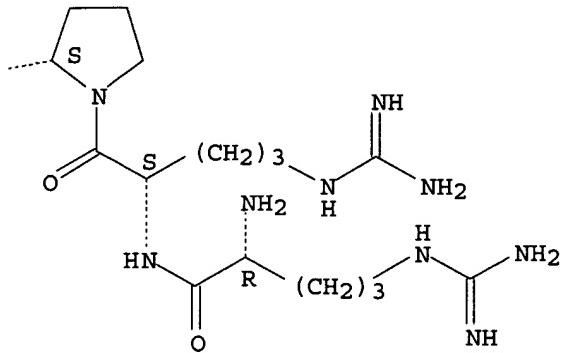
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)

Absolute stereochemistry.

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\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:185137

L25 ANSWER 5 OF 23 REGISTRY COPYRIGHT 2005 ACS on STN  
 RN 603969-58-0 REGISTRY

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## OTHER NAMES:

CN 195: PN: US20030176421 PAGE: 54-55 claimed sequence

FS PROTEIN SEQUENCE; STEREOSEARCH

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## PATENT ANNOTATIONS (PNTE):

Sequence	Patent
Source	Reference

Not Given	US2003176421
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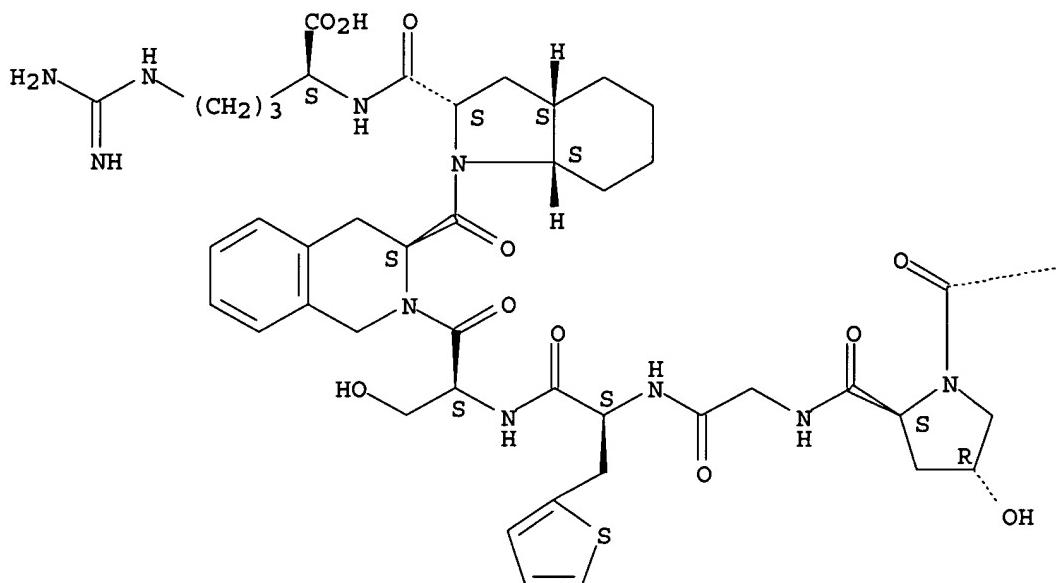
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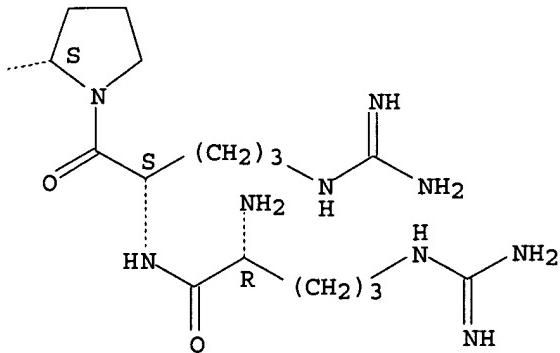
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)

## Absolute stereochemistry.

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REFERENCE 1: 139:255368

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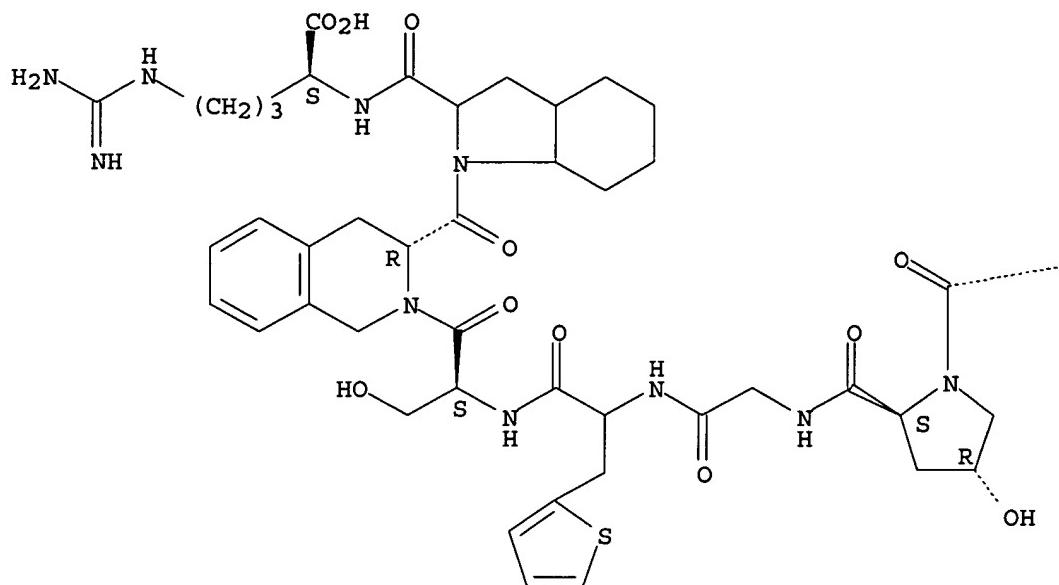
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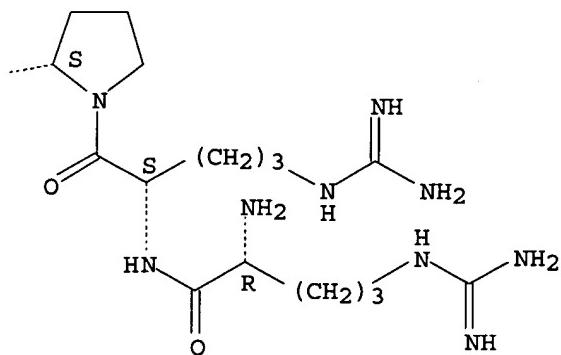
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Absolute stereochemistry.

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1 REFERENCES IN FILE CA (1907 TO DATE)  
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REFERENCE 1: 141:185137

L25 ANSWER 7 OF 23 REGISTRY COPYRIGHT 2005 ACS on STN

RN 193618-68-7 REGISTRY

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 (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH  
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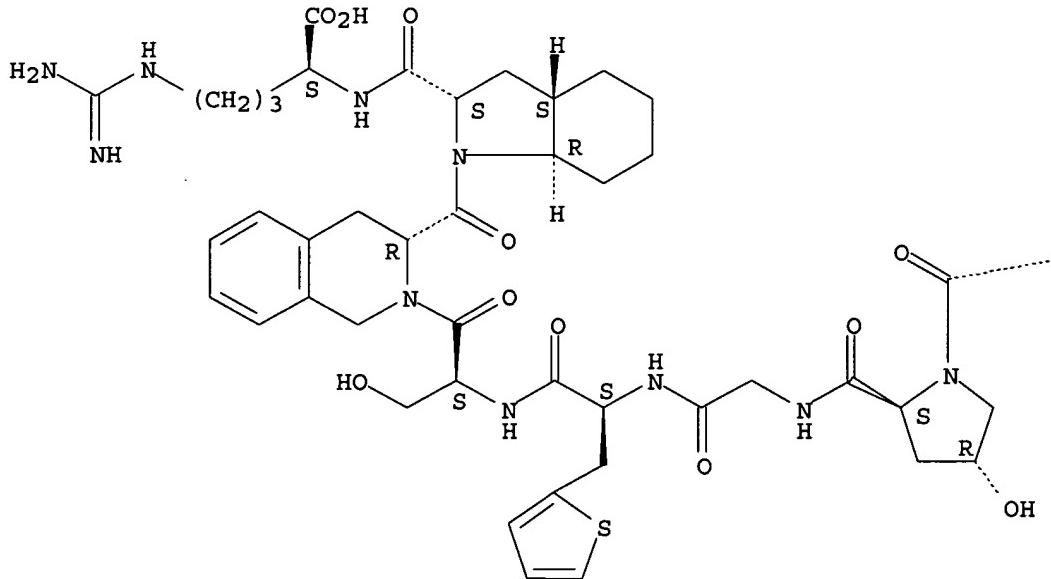
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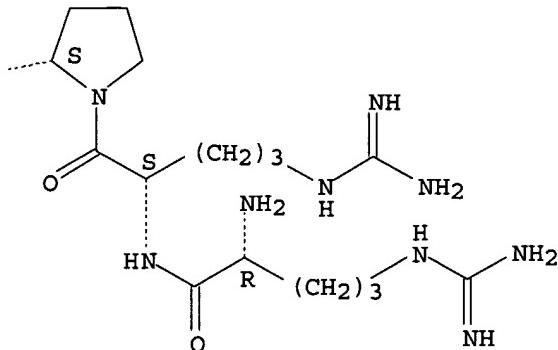
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

Absolute stereochemistry.

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1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 127:162123

L25 ANSWER 8 OF 23 REGISTRY COPYRIGHT 2005 ACS on STN  
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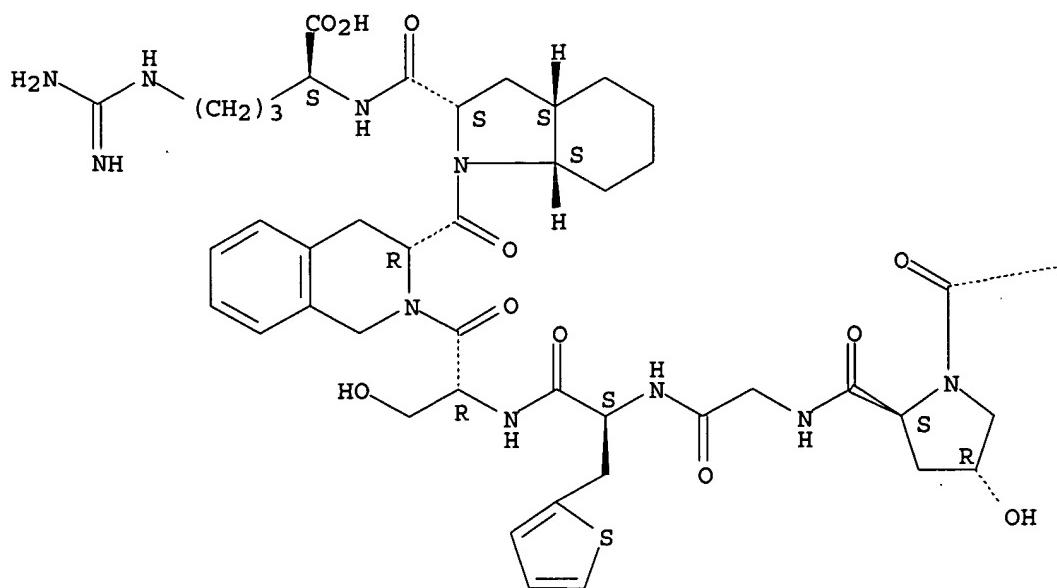
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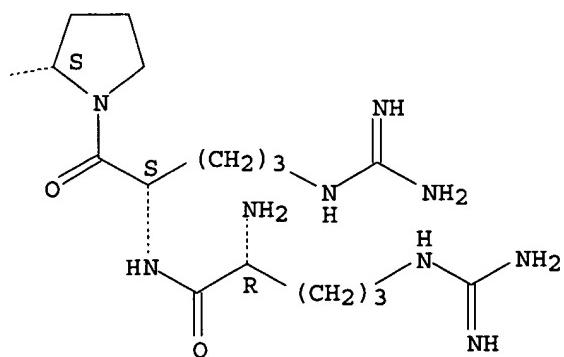
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 RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation)

Absolute stereochemistry.

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2 REFERENCES IN FILE CA (1907 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:163320

REFERENCE 2: 127:162123

L25 ANSWER 9 OF 23 REGISTRY COPYRIGHT 2005 ACS on STN

RN 193618-63-2 REGISTRY

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(2-thienyl)-D-alanyl-L-seryl-(3R)-1,2,3,4-tetrahydro-3-isoquinolinecarbonyl-(2S,3aS,7aS)-octahydro-1H-indole-2-carbonyl- (9CI)  
 (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 10

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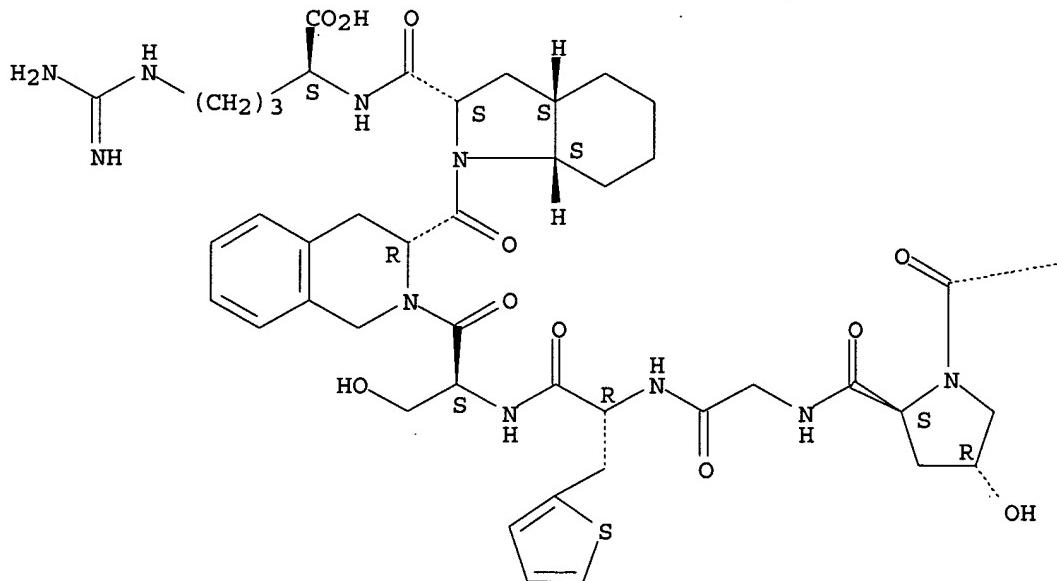
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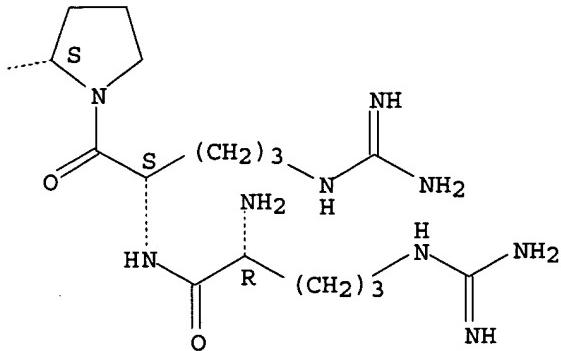
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

Absolute stereochemistry.

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1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 127:162123

L25 ANSWER 10 OF 23 REGISTRY COPYRIGHT 2005 ACS on STN  
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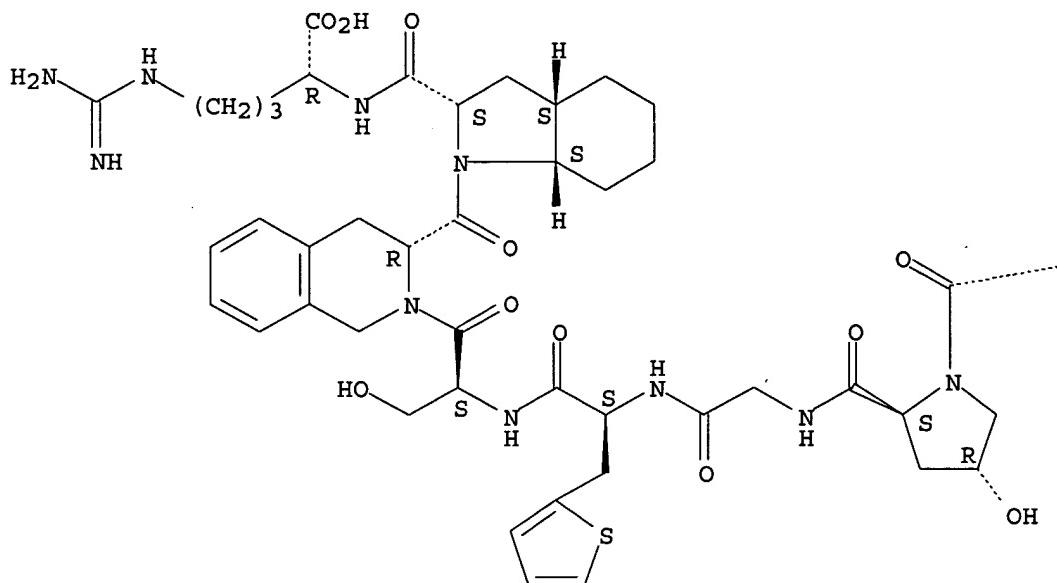
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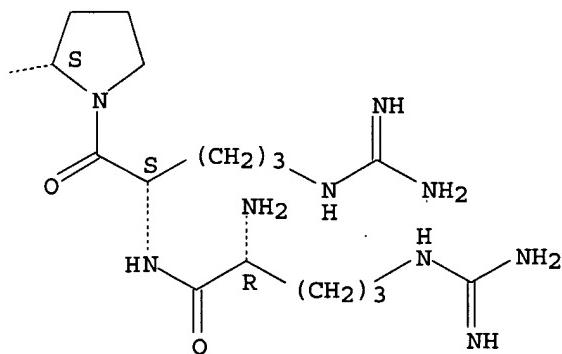
RL.NP Roles from non-patents: BIOL (Biological study); USES (Uses)

Absolute stereochemistry.

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REFERENCE 1: 141:151157

REFERENCE 2: 127:162123

L25 ANSWER 11 OF 23 REGISTRY COPYRIGHT 2005 ACS on STN

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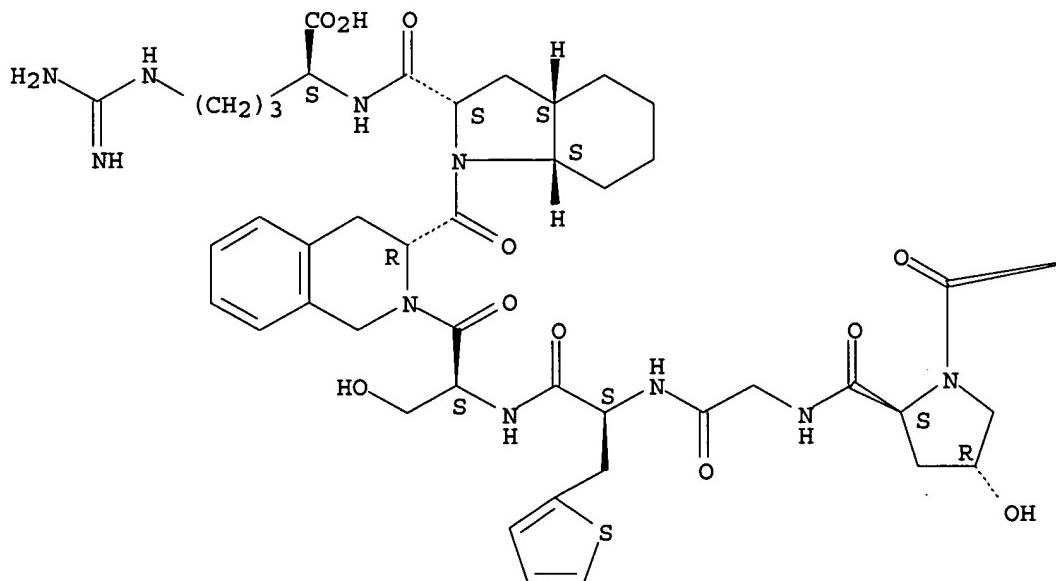
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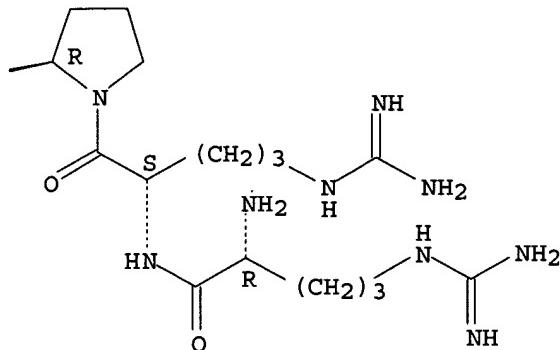
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Absolute stereochemistry.

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REFERENCE 1: 127:162123

L25 ANSWER 12 OF 23 REGISTRY COPYRIGHT 2005 ACS on STN

RN 193618-60-9 REGISTRY

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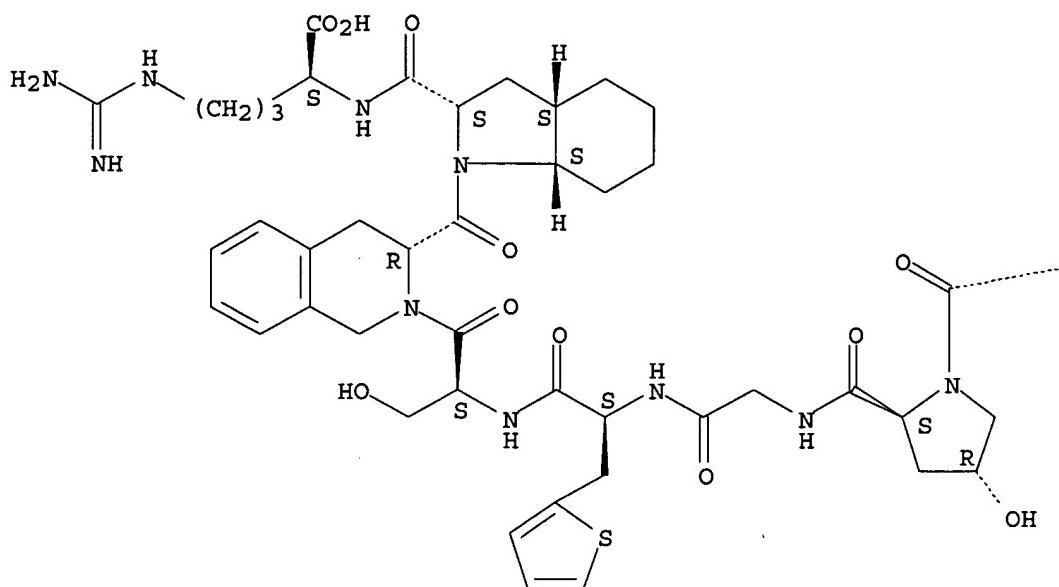
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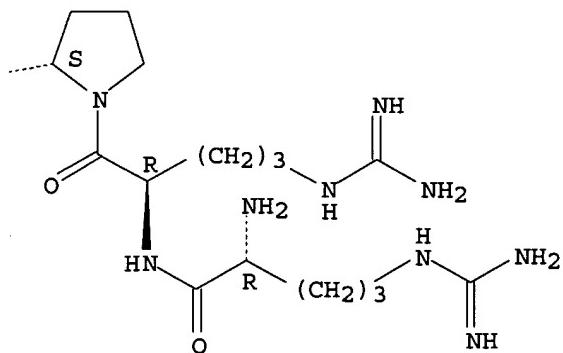
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Absolute stereochemistry.

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 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 127:162123

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FS PROTEIN SEQUENCE; STEREOSEARCH  
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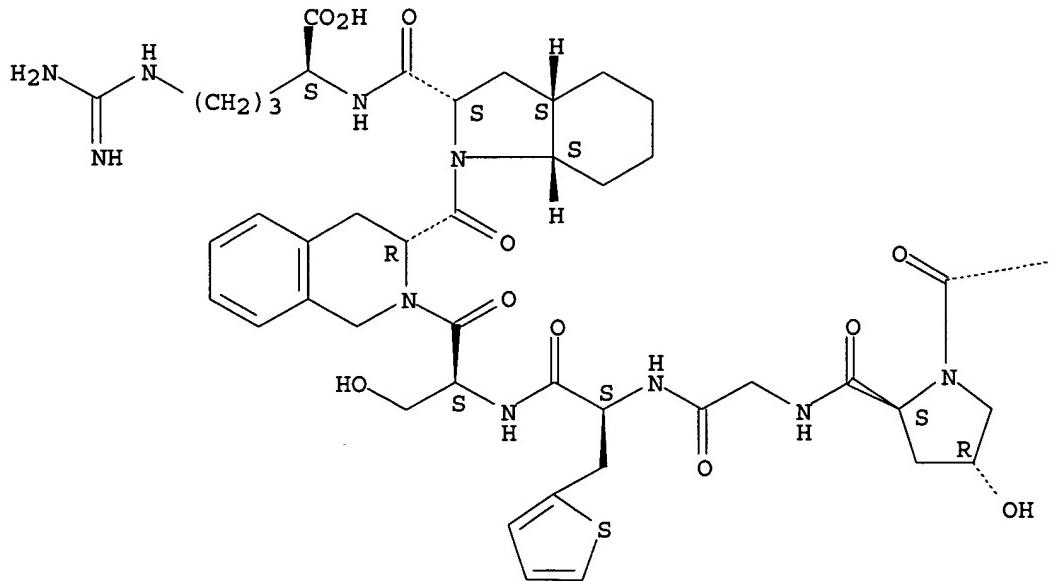
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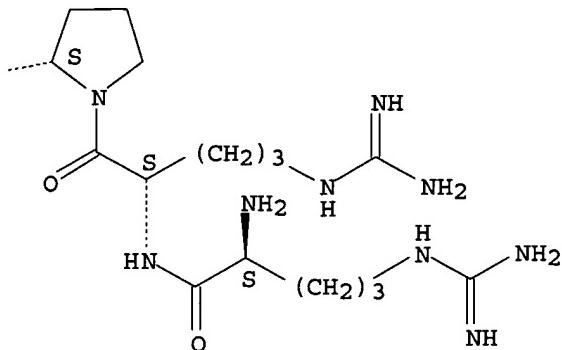
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

Absolute stereochemistry.

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PAGE 1-B



1 REFERENCES IN FILE CA (1907 TO DATE)  
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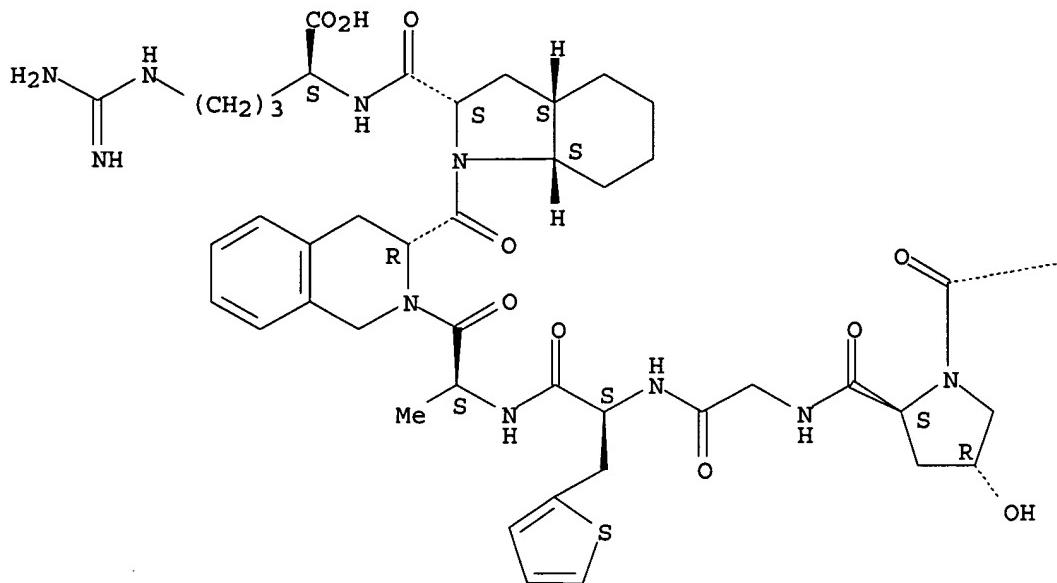
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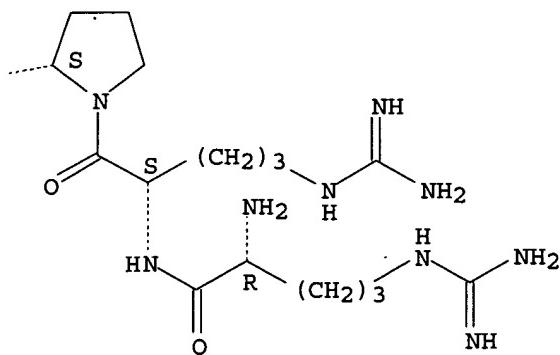
SEQ 1 RRPXGXAXXR  
 MF C59 H89 N19 O12 S  
 SR CA  
 LC STN Files: CA, CAPLUS, CASREACT  
 DT.CA CAplus document type: Journal  
 RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation);  
 PROC (Process); PRP (Properties)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



2 REFERENCES IN FILE CA (1907 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:163320

REFERENCE 2: 126:54996

L25 ANSWER 15 OF 23 REGISTRY COPYRIGHT 2005 ACS on STN  
RN 153322-84-0 REGISTRY

CN L-Arginine, D-arginyl-L-arginyl-L-prolyl-trans-4-hydroxy-L-prolylglycyl-3-(2-thienyl)-L-alanyl-L-seryl-L-1,2,3,4-tetrahydro-3-isoquinolinecarbonyl-L-(2 $\alpha$ ,3 $\alpha\beta$ ,7 $\alpha\beta$ )-octahydro-1H-indole-2-carbonyl- (9CI) (CA)  
INDEX NAME)

## OTHER NAMES:

CN Win 65365

CN [L-Tic7]HOE-140

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 10

NTE

type	----- location -----	description
uncommon	Hyp-4	-
uncommon	Thi-6	-
uncommon	Tic-8	-
uncommon	Oic-9	-

SEQ 1 RRPXGXSXXR

## \*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

MF C59 H89 N19 O13 S

SR CA

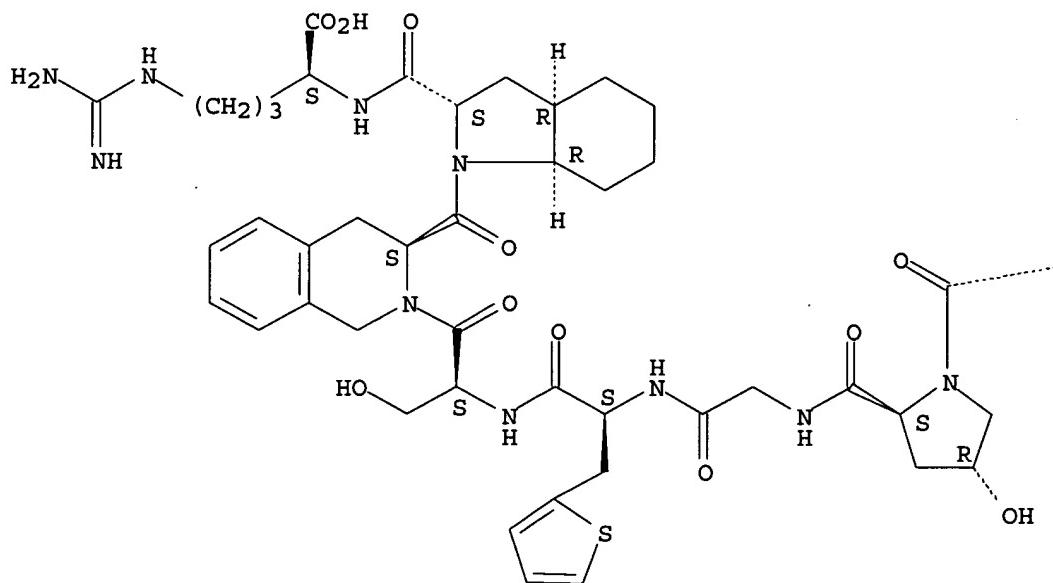
LC STN Files: CA, CAPLUS

DT.CA CAPplus document type: Journal

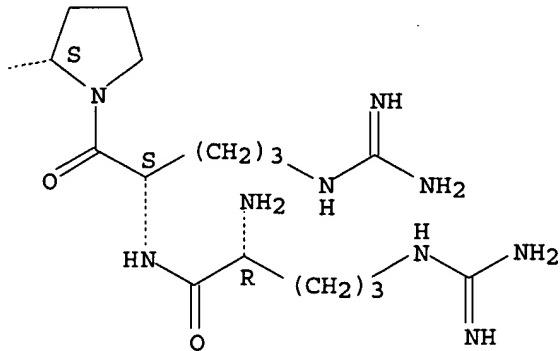
RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation); PRP (Properties)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



2 REFERENCES IN FILE CA (1907 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 121:50783

REFERENCE 2: 120:153920

L25 ANSWER 16 OF 23 REGISTRY COPYRIGHT 2005 ACS on STN

RN 151009-41-5 REGISTRY

CN L-Arginine, D-arginyl-L-arginyll-prolyl-trans-4-hydroxy-L-prolylglycyl-3-(3-thienyl)-L-alanyl-L-seryl-D-1,2,3,4-tetrahydro-3-isoquinolinecarbonyl-L-octahydro-1H-indole-2-carbonyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Woe 1114-108A

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 10

NTE

type	----- location -----	description
uncommon	Hyp-4	-
uncommon	Aaa-6	-
uncommon	Tic-8	-
uncommon	Oic-9	-
stereo	Arg-1	D
stereo	Tic-8	D

SEQ 1 RRPXGXSXXR

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

MF C59 H89 N19 O13 S

SR CA

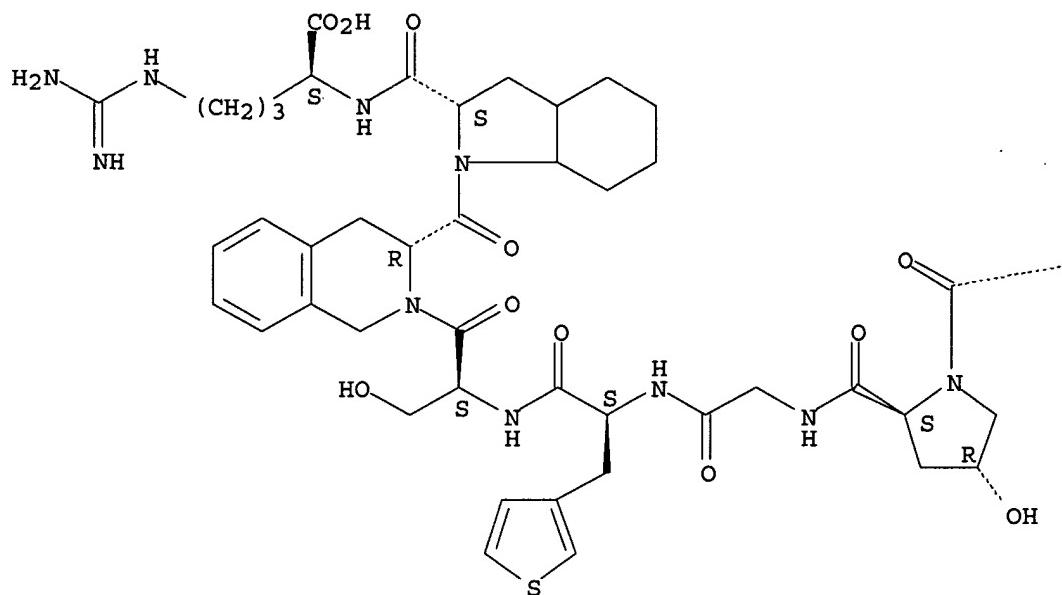
LC STN Files: CA, CAPLUS

DT.CA CAPplus document type: Conference

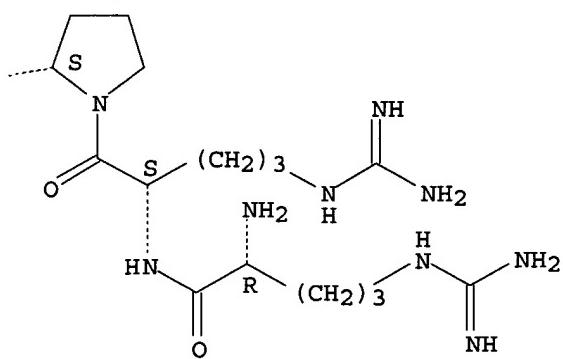
RL.NP Roles from non-patents: PROC (Process)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 119:220793

L25 ANSWER 17 OF 23 REGISTRY COPYRIGHT 2005 ACS on STN

jan delaval - 27 september 2005

RN 133162-76-2 REGISTRY

CN Bradykinin, N<sub>2</sub>-D-arginyl-3-(trans-4-hydroxy-L-proline)-7-(D-1,2,3,4-tetrahydro-3-isoquinolinecarboxylic acid)-8-[L-(2 $\alpha$ ,3 $\alpha$ ,7 $\alpha$  $\beta$ )-octahydro-1H-indole-2-carboxylic acid]-(9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 10

NTE

type	----- location -----	description
uncommon	Hyp-4	-
uncommon	Tic-8	-
uncommon	Oic-9	-

SEQ 1 RRPXGFSXXR

## \*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

MF C61 H91 N19 O13

SR CA

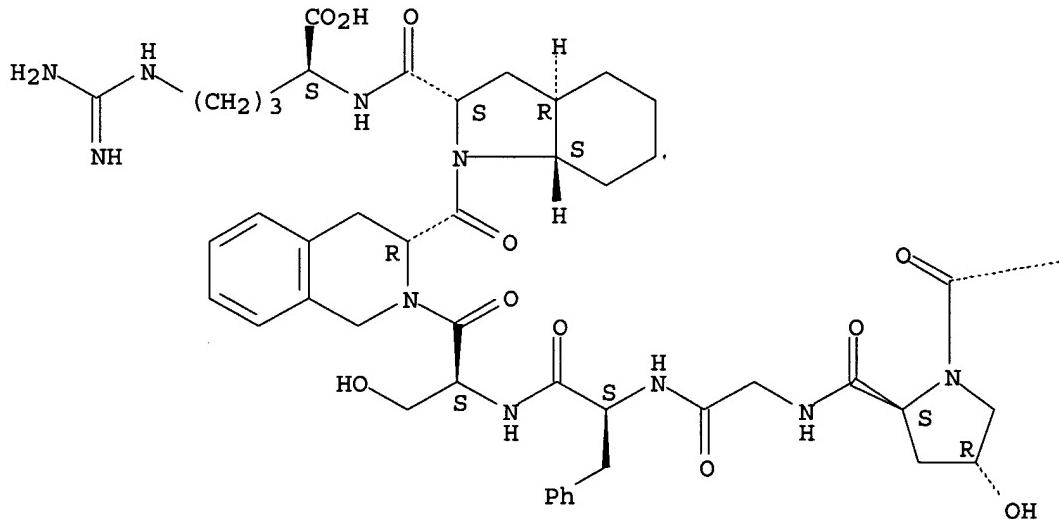
LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Journal

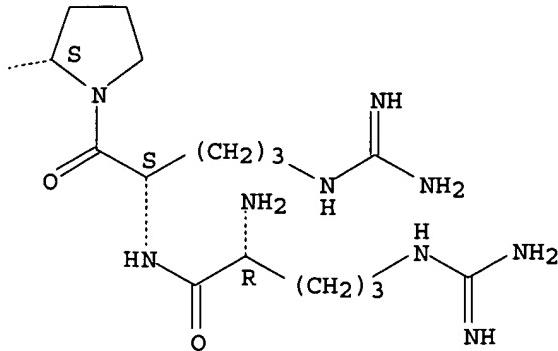
RL.NP Roles from non-patents: BIOL (Biological study)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 114:157636

L25 ANSWER 18 OF 23 REGISTRY COPYRIGHT 2005 ACS on STN  
 RN 133162-75-1 REGISTRY

CN L-Arginine, D-arginyl-L-arginyl-L-prolyl-(4R)-4-hydroxy-L-prolylglycyl-3-(2-thienyl)-L-alanyl-L-seryl-(3R)-1,2,3,4-tetrahydro-3-isoquinolinecarbonyl-(2S,3aR,7aS)-octahydro-1H-indole-2-carbonyl- (9CI)  
 (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN L-Arginine, D-arginyl-L-arginyl-L-prolyl-trans-4-hydroxy-L-prolylglycyl-3-(2-thienyl)-L-alanyl-L-seryl-D-1,2,3,4-tetrahydro-3-isoquinolinecarbonyl-L-(2 $\alpha$ ,3 $\alpha$ ,7 $\alpha\beta$ )-octahydro-1H-indole-2-carbonyl-

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 10

NTE

type	-----	location	-----	description
uncommon	Hyp-4	-	-	
uncommon	Thi-6	-	-	
uncommon	Tic-8	-	-	
uncommon	Oic-9	-	-	

SEQ 1 RRPXGXSXXR

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

MF C59 H89 N19 O13 S

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

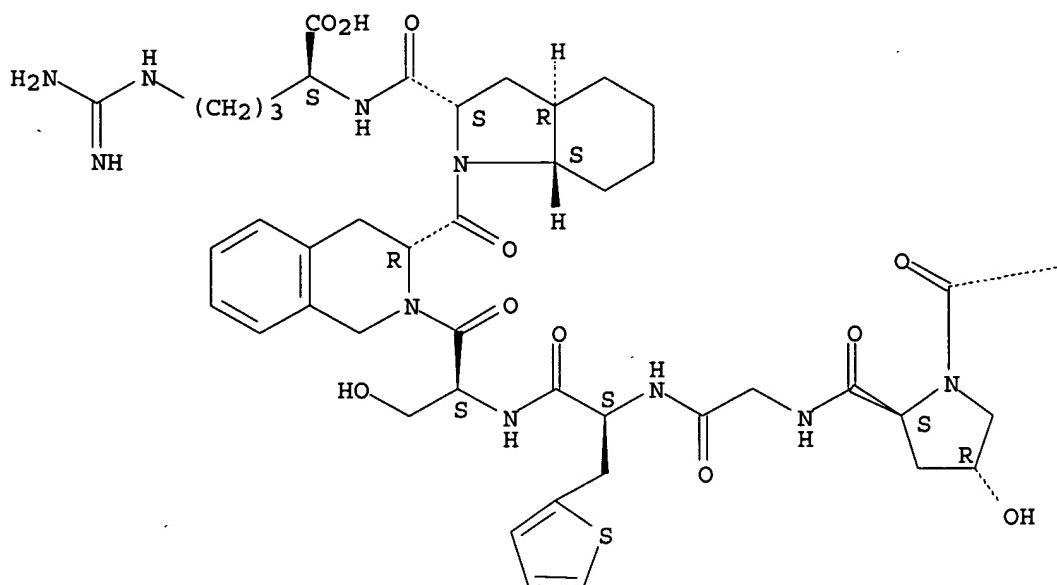
DT.CA Cplus document type: Journal; Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

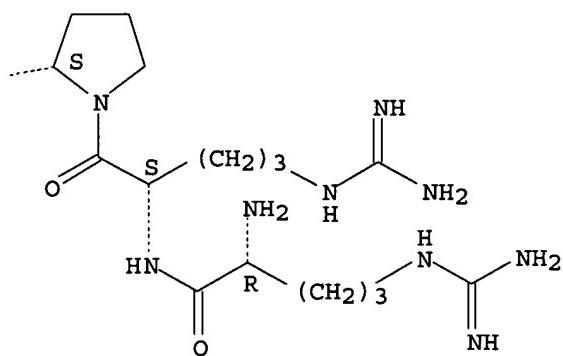
RL.NP Roles from non-patents: BIOL (Biological study)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



2 REFERENCES IN FILE CA (1907 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 127:162123

REFERENCE 2: 114:157636

L25 ANSWER 19 OF 23 REGISTRY COPYRIGHT 2005 ACS on STN  
 RN 130404-96-5 REGISTRY  
 CN L-Arginine, D-arginyl-L-arginyl-L-prolyl-(4R)-4-hydroxy-L-prolylglycyl-3-(2-thienyl)-L-alanyl-L-seryl-(3R)-1,2,3,4-tetrahydro-3-isoquinolinecarbonyl-(2R,3aR,7aR)-octahydro-1H-indole-2-carbonyl- (9CI)  
 (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN L-Arginine, D-arginyl-L-arginyl-L-prolyl-trans-4-hydroxy-L-prolylglycyl-3-(2-thienyl)-L-alanyl-L-seryl-D-1,2,3,4-tetrahydro-3-isoquinolinecarbonyl-D-(2 $\alpha$ ,3a $\beta$ ,7a $\beta$ )-octahydro-1H-indole-2-carbonyl-  
 FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 10  
 NTE

type	-----	location	-----	description
uncommon	Hyp-4	-	-	
uncommon	Thi-6	-	-	
uncommon	Tic-8	-	-	
uncommon	Oic-9	-	-	

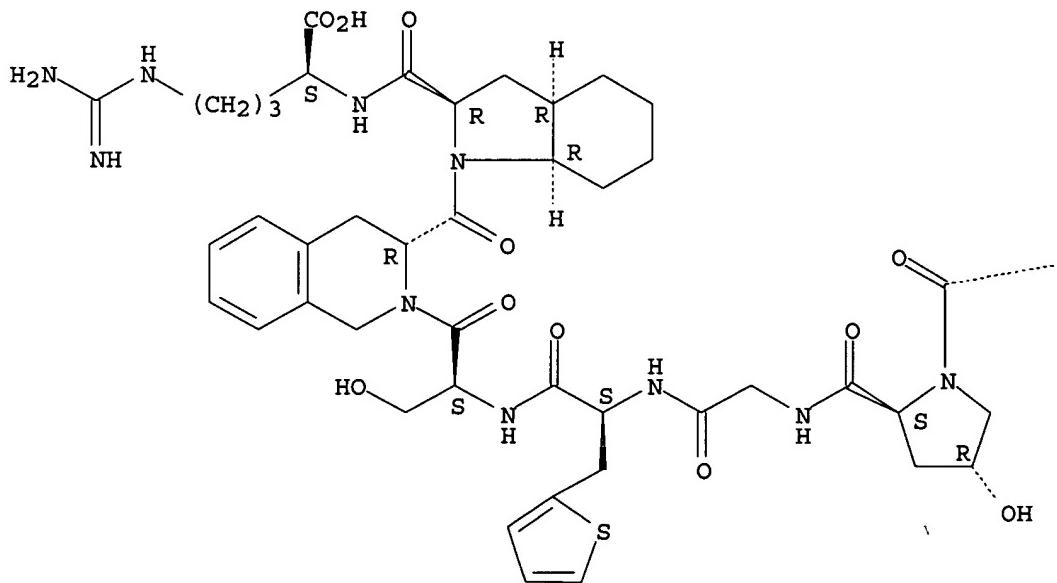
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\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

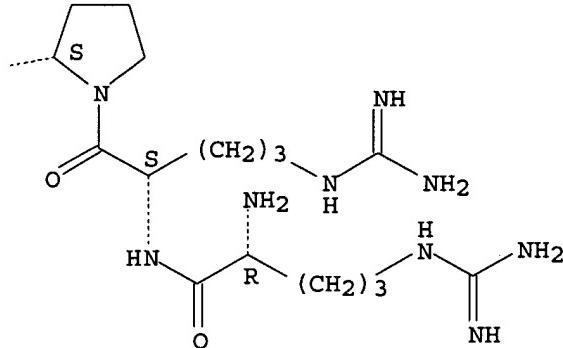
MF C59 H89 N19 O13 S  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL  
 DT.CA CAPplus document type: Patent  
 RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



2 REFERENCES IN FILE CA (1907 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 127:162123

REFERENCE 2: 114:207831

L25 ANSWER 20 OF 23 REGISTRY COPYRIGHT 2005 ACS on STN

RN 130334-55-3 REGISTRY

CN Bradykinin, N2-D-arginyl-3-(trans-4-hydroxy-L-proline)-7-(D-1,2,3,4-tetrahydro-3-isoquinolinecarboxylic acid)-8-[L-(2 $\alpha$ ,3 $\alpha$ ,7 $\alpha$ )-octahydro-1H-indole-2-carboxylic acid] - (9CI)  
 (CA INDEX NAME)

OTHER NAMES:

CN NPC 18545

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 10

NTE

type	location	description
uncommon	Hyp-4	-
uncommon	Tic-8	-
uncommon	Oic-9	-

SEQ 1 RRPXGFSXXR

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

MF C61 H91 N19 O13

SR CA

LC STN Files: BIOSIS, CA, CAPLUS, PHAR, TOXCENTER, USPATFULL

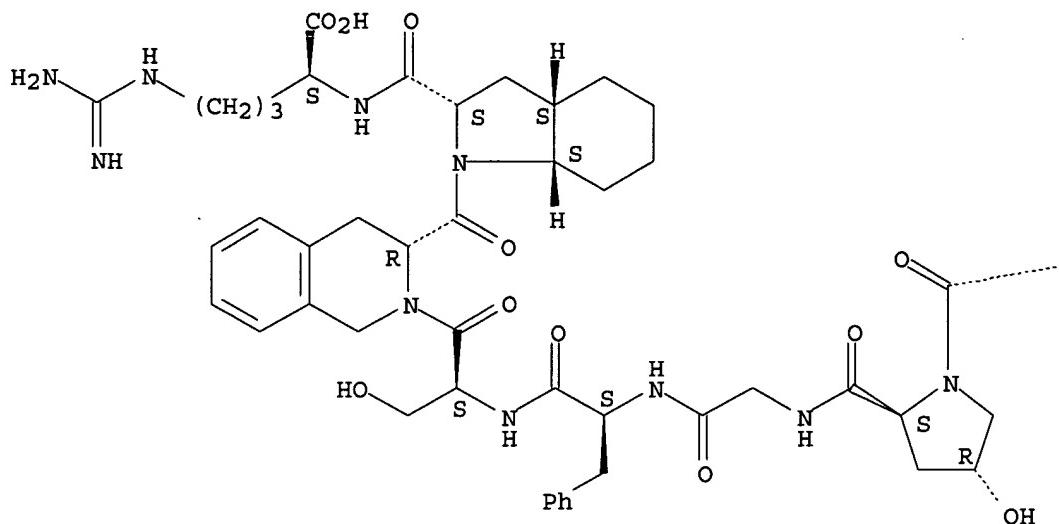
DT.CA CAPplus document type: Conference; Journal; Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

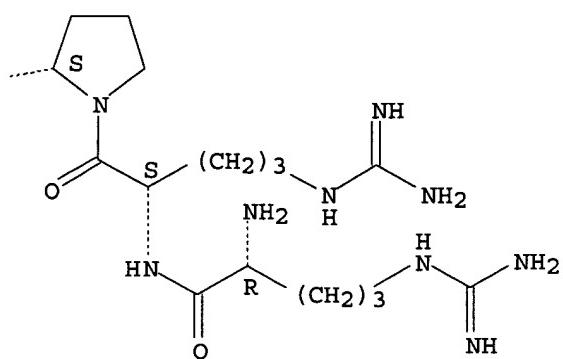
RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



11 REFERENCES IN FILE CA (1907 TO DATE)  
11 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 128:290242

REFERENCE 2: 127:314823

REFERENCE 3: 127:162123

REFERENCE 4: 121:281159

REFERENCE 5: 120:290682

REFERENCE 6: 120:208607

REFERENCE 7: 119:250452

REFERENCE 8: 119:41697

REFERENCE 9: 118:261015

REFERENCE 10: 116:188596

L25 ANSWER 21 OF 23 REGISTRY COPYRIGHT 2005 ACS on STN

RN 130308-53-1 REGISTRY

CN Bradykinin, N2-D-arginyl-7-(D-1,2,3,4-tetrahydro-3-isoquinolinecarboxylic acid)-8-[(2 $\alpha$ ,3 $\alpha$ ,7 $\beta$ )-L-octahydro-1H-indole-2-carboxylic acid]- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 10

NTE

-----  
type ----- location ----- description  
-----

uncommon Tic-8 - -  
uncommon Oic-9 - -

SEQ 1 RRPPGFSXXR

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

MF C61 H91 N19 O12

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

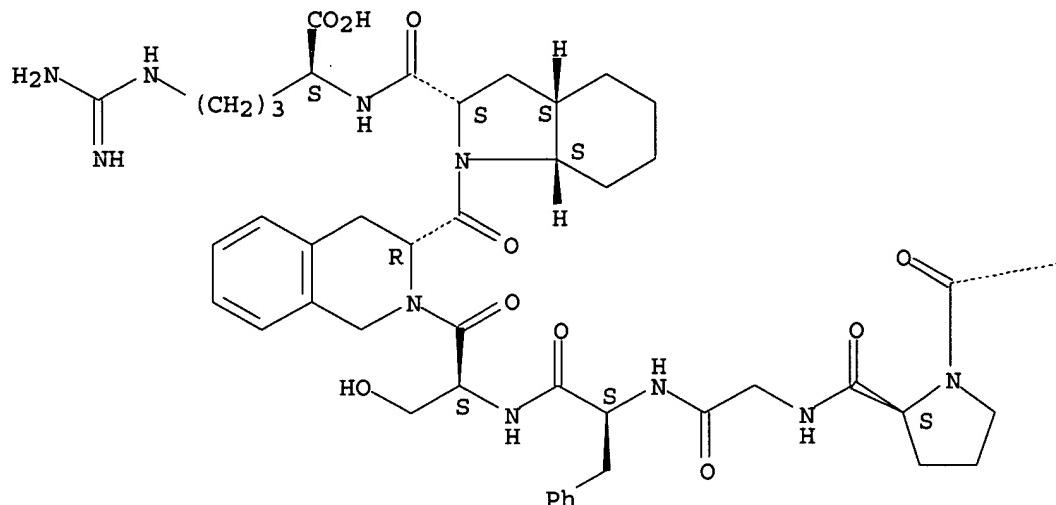
DT.CA CAplus document type: Journal; Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

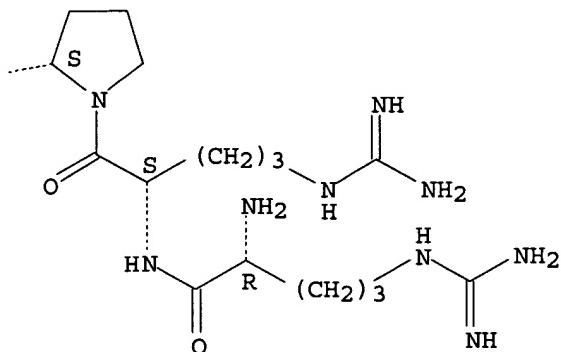
RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological study); PREP (Preparation)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



3 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 127:162123

REFERENCE 2: 125:168616

REFERENCE 3: 114:207831

L25 ANSWER 22 OF 23 REGISTRY COPYRIGHT 2005 ACS on STN  
RN 130308-52-0 REGISTRY

CN Bradykinin, N<sub>2</sub>-D-arginyl-2-(trans-4-hydroxy-L-proline)-7-(D-1,2,3,4-tetrahydro-3-isoquinolinecarboxylic acid)-8-[(2 $\alpha$ ,3 $\alpha$ ,7 $\beta$ )-L-octahydro-1H-indole-2-carboxylic acid]- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 10

NTE

type	----- location -----	description
uncommon	Hyp-3	-
uncommon	Tic-8	-
uncommon	Oic-9	-

SEQ 1 RRXPGFSXXR

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

MF C61 H91 N19 O13

SR CA

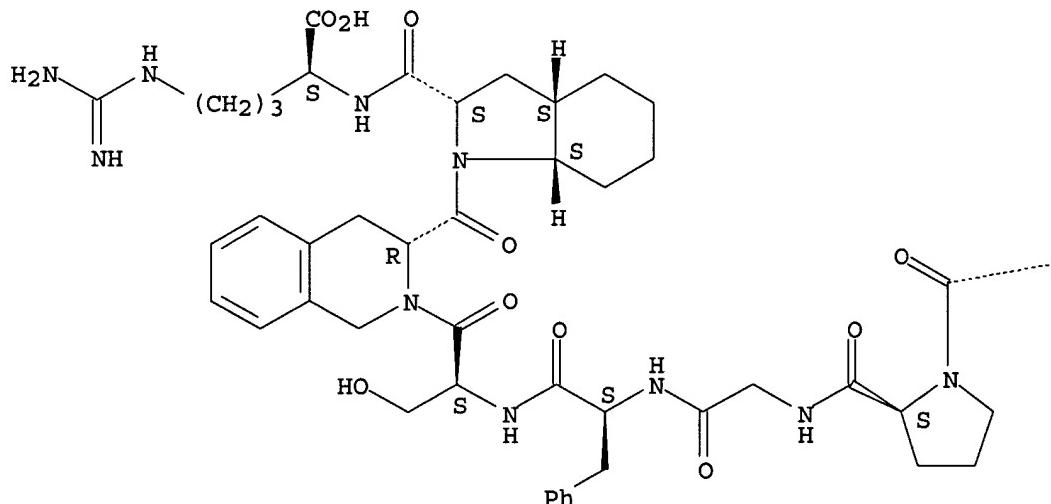
LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent

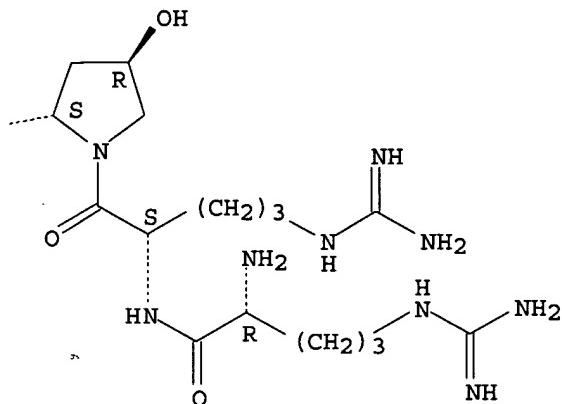
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



2 REFERENCES IN FILE CA (1907 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 127:162123

REFERENCE 2: 114:207831

L25 ANSWER 23 OF 23 REGISTRY COPYRIGHT 2005 ACS on STN

RN 130308-49-5 REGISTRY

CN L-Arginine, D-arginyl-L-arginyll-prolyl-L-prolylglycyl-3-(2-thienyl)-L-alanyl-L-seryl-(3R)-1,2,3,4-tetrahydro-3-isoquinolinecarbonyl-(2S,3aS,7aS)-octahydro-1H-indole-2-carbonyl- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Bradykinin, N2-D-arginyl-5-[3-(2-thienyl)-L-alanine]-7-(D-1,2,3,4-tetrahydro-3-isoquinolinecarboxylic acid)-8-[(2 $\alpha$ ,3a $\beta$ ,7a $\beta$ )-L-octahydro-1H-indole-2-carboxylic acid]-

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 10

NTE

type	-----	location	-----	description
uncommon	Thi-6	-	-	
uncommon	Tic-8	-	-	
uncommon	Oic-9	-	-	

SEQ 1 RRPPGXSXXR

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

DR 197370-25-5

MF C59 H89 N19 O12 S

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

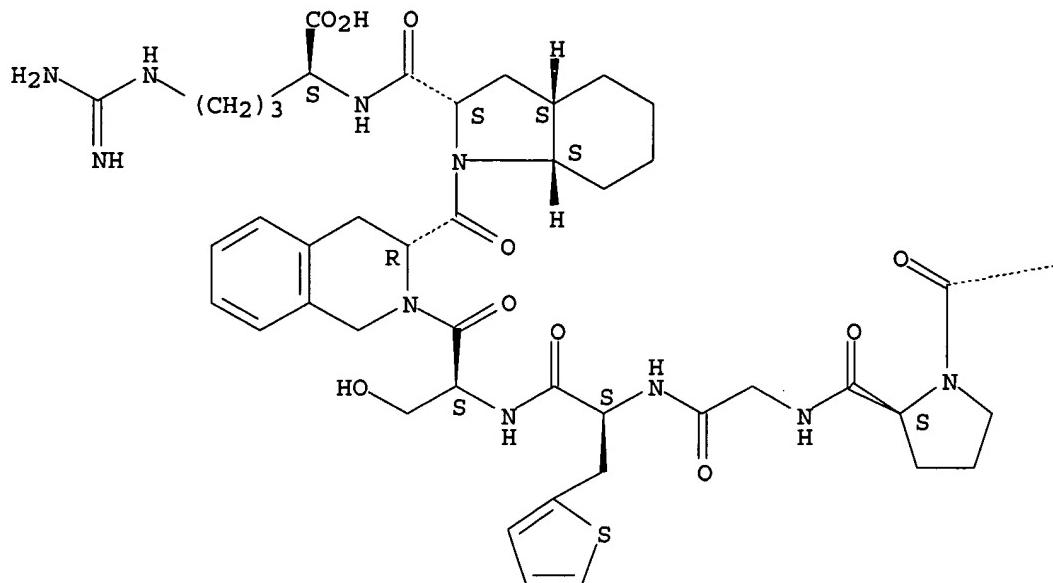
DT.CA Caplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PRP

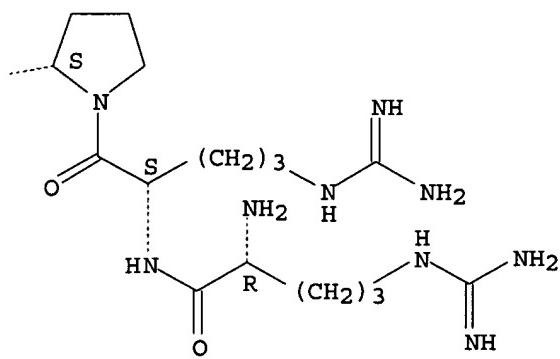
### **(Properties); USES (Uses)**

## Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



7 REFERENCES IN FILE CA (1907 TO DATE)  
7 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:185137

REFERENCE 2: 128:290242

REFERENCE 3: 127:314823  
 REFERENCE 4: 127:162123  
 REFERENCE 5: 120:208607  
 REFERENCE 6: 118:261015  
 REFERENCE 7: 114:207831

=> d his

(FILE 'HOME' ENTERED AT 07:06:50 ON 27 SEP 2005)  
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FILE 'HCAPLUS' ENTERED AT 07:06:57 ON 27 SEP 2005  
 L1 1 S US20040248809/PN OR (US2004-773772# OR US2003-480246# OR DE20  
     E MICHAELIS/AU  
 L2 5 S E3  
     E MICHAELIS M/AU  
 L3 133 S E3-E5,E9-E11  
     E RUDOLPHI/AU  
 L4 93 S E3,E13-E17  
     E AVENTI/PA,CS  
 L5 2556 S AVENTIS?/PA,CS  
     SEL RN L1

FILE 'REGISTRY' ENTERED AT 07:10:09 ON 27 SEP 2005  
 L6 7 S E1-E7  
 L7 6 S L6 AND SQL/FA  
     E C61H91N19O12/MF  
 L8 2 S E3 AND SQL/FA  
     E C61H91N19O13/MF  
 L9 10 S E3 AND SQL/FA  
     E C59H89N19O12S/MF  
 L10 3 S E3 AND SQL/FA  
     E C59H89N19O13S/MF  
 L11 14 S E3 AND SQL/FA  
 L12 23 S L8-L11 NOT L7  
 L13 18 S L12 NOT (ASPARAG? OR CYCLOPENT? OR LEUC?)  
 L14 24 S L7,L13  
     SAV L14 GARCIA773/A  
     SEL RN  
 L15 1 S E1-E24/CRN  
 L16 74 SEQLINK EXACT L14  
 L17 49 S L16 NOT L14,L15

FILE 'HCAOLD' ENTERED AT 07:24:43 ON 27 SEP 2005  
 L18 0 S L14 OR L15

FILE 'HCAPLUS' ENTERED AT 07:24:47 ON 27 SEP 2005  
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 L20 7 S L7  
 L21 4 S L2-L5 AND L19  
 L22 2 S L2-L5 AND L20  
 L23 4 S L21,L22  
 L24 9 S L20-L23,L1

FILE 'REGISTRY' ENTERED AT 07:27:29 ON 27 SEP 2005  
L25           23 S L14 NOT 130308-48-4

FILE 'HCAPLUS' ENTERED AT 07:29:17 ON 27 SEP 2005  
L26           21 S L25  
L27           2 S L1-L5 AND L26  
L28           21 S L26 AND (PD<=20030620 OR PRD<=20030620 OR AD<=20030620)  
L29           21 S L26,L28

FILE 'USPATFULL' ENTERED AT 07:30:19 ON 27 SEP 2005  
L30           6 S L25

FILE 'REGISTRY' ENTERED AT 07:31:18 ON 27 SEP 2005

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FILE 'USPATFULL' ENTERED AT 07:31:39 ON 27 SEP 2005  
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 22 Sep 2005 (20050922/PD)  
FILE LAST UPDATED: 22 Sep 2005 (20050922/ED)  
HIGHEST GRANTED PATENT NUMBER: US6948186  
HIGHEST APPLICATION PUBLICATION NUMBER: US2005210555  
CA INDEXING IS CURRENT THROUGH 22 Sep 2005 (20050922/UPCA)  
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 22 Sep 2005 (20050922/PD)  
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2005  
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2005

>>> USPAT2 is now available. USPATFULL contains full text of the       <<<  
>>> original, i.e., the earliest published granted patents or       <<<  
>>> applications. USPAT2 contains full text of the latest US       <<<  
>>> publications, starting in 2001, for the inventions covered in       <<<  
>>> USPATFULL. A USPATFULL record contains not only the original       <<<  
>>> published document but also a list of any subsequent       <<<  
>>> publications. The publication number, patent kind code, and       <<<  
>>> publication date for all the US publications for an invention       <<<  
>>> are displayed in the PI (Patent Information) field of USPATFULL       <<<  
>>> records and may be searched in standard search fields, e.g., /PN,       <<<  
>>> /PK, etc.    <<<

>>> USPATFULL and USPAT2 can be accessed and searched together       <<<  
>>> through the new cluster USPATALL. Type FILE USPATALL to       <<<  
>>> enter this cluster.    <<<  
>>>    <<<  
>>> Use USPATALL when searching terms such as patent assignees,       <<<  
>>> classifications, or claims, that may potentially change from       <<<  
>>> the earliest to the latest publication.                            <<<

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d l30 bib abs hitrn tot

L30 ANSWER 1 OF 6 USPATFULL on STN  
AN 2004:315133 USPATFULL  
TI Use of antagonists of the bradykinin B2 receptor for the treatment of osteoarthritis  
IN Michaelis, Martin, Frankfurt, GERMANY, FEDERAL REPUBLIC OF  
Rudolphi, Karl, Mainz, GERMANY, FEDERAL REPUBLIC OF  
PA Aventis Pharma Deutschland GmbH, Frankfurt am Main, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation)

PI US 2004248809 A1 20041209  
 AI US 2004-773772 A1 20040206 (10)  
 PRAI DE 2003-10304994 20030207  
       US 2003-480246P 20030620 (60)  
 DT Utility  
 FS APPLICATION  
 LREP ROSS J. OEHLER, AVENTIS PHARMACEUTICALS INC., ROUTE 202-206, MAIL CODE:  
       D303A, BRIDGEWATER, NJ, 08807  
 CLMN Number of Claims: 7  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 614

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Peptides having bradykinin-antagonistic action are suitable for the production of pharmaceuticals for the prophylaxis and therapy of diseases in whose course an increased activity of matrix metalloproteinases is involved. These include diseases such as degenerative joint diseases, for example osteoarthritis, spondylosis and chondroporosis after joint trauma or relatively long immobilization of a joint after meniscus or patella injuries or torn ligaments. The invention therefore relates to the use of a compound of the formula I,

A-B-X-E-F-K- (D) -TIC-G-M-F' -I (I)

for the production of pharmaceuticals for the treatment of degenerative joint diseases, wherein A, B, X, E, F, K, (D)-TIC, G, M, F' and I are as defined herein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 130308-49-5 199870-83-2 740808-61-1  
     740808-62-2 740808-63-3 740808-64-4  
           (bradykinin B2 receptor antagonists for treating osteoarthritis and other matrix metalloproteinase-associated diseases)

L30 ANSWER 2 OF 6 USPATFULL on STN  
 AN 2003:251632 USPATFULL  
 TI PROKINETIC AGENTS FOR TREATING GASTRIC HYPOMOTILITY AND RELATED DISORDERS  
 IN WATSON, JOHN W., LEDYARD, CT, UNITED STATES  
       ANDREWS, PAUL L. R., LONDON, UNITED KINGDOM  
       WOODS, ANTHONY J., LONDON, UNITED KINGDOM  
 PI US 2003176421 A1 20030918  
 AI US 1999-476253 A1 19991230 (9)  
 DT Utility  
 FS APPLICATION  
 LREP PFIZER INC, 150 EAST 42ND STREET, 5TH FLOOR - STOP 49, NEW YORK, NY,  
       10017-5612  
 CLMN Number of Claims: 41  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 4249

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Stasis is treated or prevented in all or any part or parts of the stomach of a patient, especially a human patient, in need of such treatment, where said stasis results from hypomotility in the stomach, particularly gastric hypomotility with delayed emptying of the liquid and/or solid contents of the stomach. Gastric or gastrointestinal disorders are also treated which are characterized by one or more symptoms selected from pain, nausea, vomiting, heartburn, postprandial discomfort, indigestion and gastroesophageal reflux. Such treatment or

prevention is achieved by administering to the patient a therapeutically effective amount of an inhibitor of phosphodiesterase-4 (PDE4), including isozyme subtypes thereof, sufficient to treat or prevent such hypomotility or gastric or gastrointestinal disorder in said patient. The PDE4 inhibitor comprises a compound of Formula (IA) or (IB):  
##STR1##

where in a preferred embodiment, R is cyclopentyl or cyclohexyl; R.<sup>1</sup> is (C.<sub>1</sub>-C.<sub>4</sub>) alkyl; one of R.<sup>2</sup>.sub.a and R.<sup>2</sup>.sub.b is hydrogen and the other is a substituent of partial Formula (1.0.0) above, where the dashed line represents a single bond, m is 0, R.<sup>113</sup> and R.<sup>114</sup> are in a cis relationship to each other, R.<sup>113</sup> is cyano, R.<sup>115</sup> is hydrogen, and R.<sup>114</sup> is carboxy, --CH.<sub>2</sub>OH, or --CH.<sub>2</sub>C(.dbd.O)NH.<sub>2</sub>.

Pharmaceutical compositions are also described which are useful for carrying out the above-mentioned methods of treatment and prevention, and which are also useful in the treatment of a gastric or gastrointestinal disorder in a patient which comprises with respect to said patient, (i) a sign or concomitant of diabetic neuropathy, anorexia nervosa, achlorhydria, gastrointestinal surgery, post-surgical recovery in the period of emergence from general anesthesia; or the administration of morphine and morphine-like opioids; (ii) a secondary aspect of a primary disease or disorder in said patient which is organic, wherein said disease or disorder involves particularly a gastroenteric or gastroesophageal organ or tissue, or an organ or tissue of the central nervous system of said patient; or (iii) an adverse side effect of a different therapeutic agent administered to said patient in the course of treating another unrelated disease or disorder in said patient.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 603969-58-0

(as auxiliary therapeutic agent; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

L30 ANSWER 3 OF 6 USPATFULL on STN  
 AN 2001:86438 USPATFULL  
 TI Use of peptidic bradykinin antagonists for the treatment and prevention of Alzheimer's disease  
 IN Heitsch, Holger, Mainz-Kastel, Germany, Federal Republic of  
       Henke, Stephan, Hofheim, Germany, Federal Republic of  
       Breipohl, Gerhard, Frankfurt, Germany, Federal Republic of  
       Knolle, Jochen, Kriftel, Germany, Federal Republic of  
       Wirth, Klaus, Kriftel, Germany, Federal Republic of  
       Wiemer, Gabriele, Kronberg, Germany, Federal Republic of  
 PA Aventis Pharma Deutschland GmbH, Frankfurt am Main, Germany, Federal Republic of (non-U.S. corporation)  
 PI US 6245736 B1 20010612  
 AI US 1997-949496 19971014 (8)  
 PRAI DE 1996-19642289 19961014  
 DT Utility  
 FS GRANTED  
 EXNAM Primary Examiner: Jones, Dwayne C.; Assistant Examiner:  
                           Delacroix-Muirheid, C.  
 LREP Finnegan, Henderson, Farabow, Garrett and Dunner, L.L.P.  
 CLMN Number of Claims: 15  
 ECL Exemplary Claim: 1  
 DRWN No Drawings

LN.CNT 626

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to the use of bradykinin antagonists for the production of pharmaceuticals for the treatment and prevention of Alzheimer's disease. Suitable bradykinin antagonists are peptides which inhibit the effects of the Alzheimer's protein amyloid ( $\beta$ /A4) on isolated endothelial cells. A particularly suitable peptide is H-D-Arg-Arg-Pro-Hyp-Gly-Thi-Ser-D-Tic-Oic-Arg-OH (HOE 140) and its physiologically tolerable salts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 130308-49-5 130334-55-3

(use of bradykinin antagonists for treatment and prevention of Alzheimer's disease)

L30 ANSWER 4 OF 6 USPATFULL on STN

AN 1999:12910 USPATFULL

TI Use of bradykinin antagonists for the production of pharmaceuticals for the treatment of chronic fibrogenetic liver disorders and acute liver disorders

IN Breipohl, Gerhard, Frankfurt, Germany, Federal Republic of Henke, Stephan, Hofheim, Germany, Federal Republic of Knolle, Jochen, Kriftel, Germany, Federal Republic of Wirth, Klaus, Kriftel, Germany, Federal Republic of Hropot, Max, Florsheim, Germany, Federal Republic of Bickel, Martin, Bad Homburg, Germany, Federal Republic of

PA Hoechst Aktiengesellschaft, Frankfurt am Main, Germany, Federal Republic of (non-U.S. corporation)

PI US 5863901 19990126

AI US 1997-810012 19970304 (8)

PRAI DE 1996-19612067 19960327

DT Utility

FS Granted

EXNAM Primary Examiner: Tsang, Cecilia J.; Assistant Examiner: Delacroix-Muirheid, C.

LREP Finnegan, Henderson, Farabow, Garrett &amp; Dunner, L.L.P.

CLMN Number of Claims: 16

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1036

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to a method of treating a chronic fibrogenetic liver disorder and/or an acute liver disorder and/or complications associated therewith, comprising administering to a patient a therapeutically effective amount of a bradykinin antagonist. Particular complications associated with said liver disorders include portal hypertension, decompensation phenomena such as ascites, edema formation, hepatorenal syndrome, hypertensive gastropathy and colopathy, splenomegaly and hemorrhagic complications in the gastrointestinal tract due to portal hypertension, collateral circulation and hyperemia and a cardiopathy as a result of a chronically hyperdynamic circulatory situation and its consequences.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

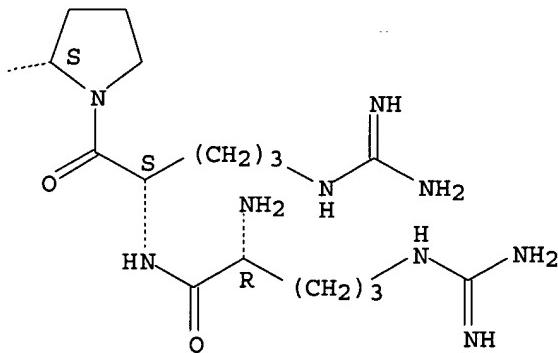
IT 130308-49-5 130334-55-3

(use of bradykinin antagonists for treatment of chronic fibrogenic liver diseases)

L30 ANSWER 5 OF 6 USPATFULL on STN

AN 97:86726 USPATFULL

PAGE 1-B

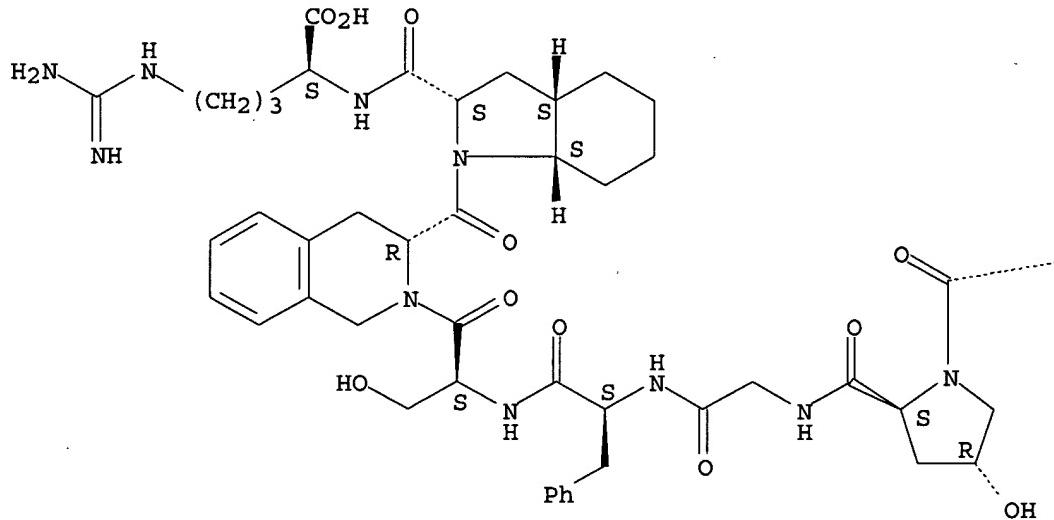


RN 130334-55-3 HCPLUS

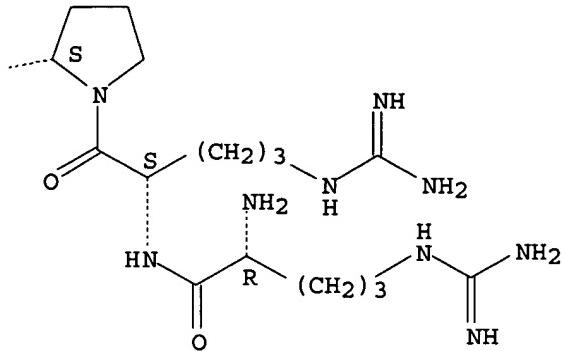
CN Bradykinin, N<sub>2</sub>-D-arginyl-3-(trans-4-hydroxy-L-proline)-7-(D-1,2,3,4-tetrahydro-3-isoquinolinecarboxylic acid)-8-[L-(2 $\alpha$ ,3 $\alpha$  $\beta$ ,7 $\alpha$  $\beta$ )-octahydro-1H-indole-2-carboxylic acid]- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

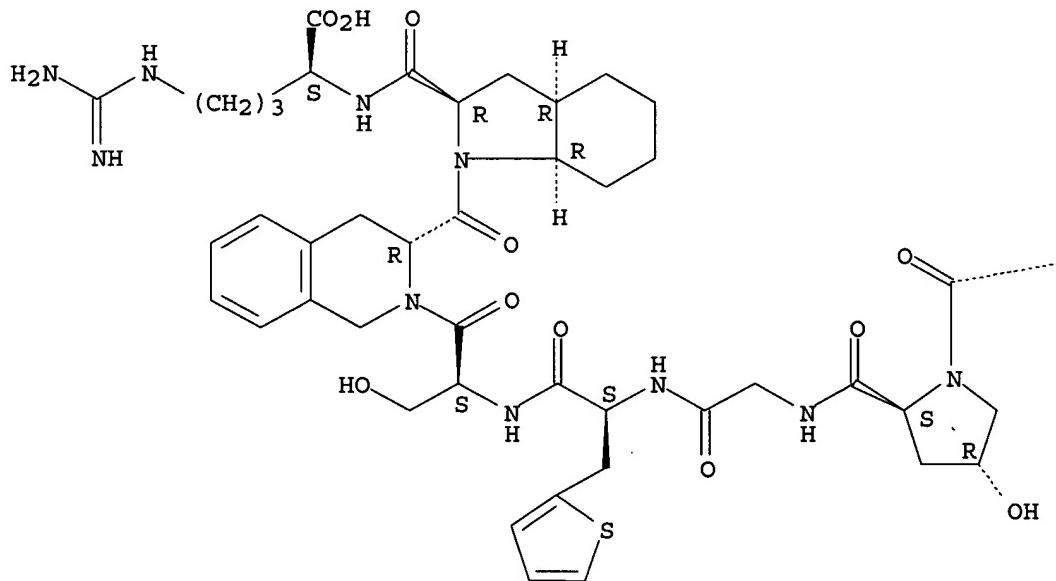


RN 130404-96-5 HCAPLUS

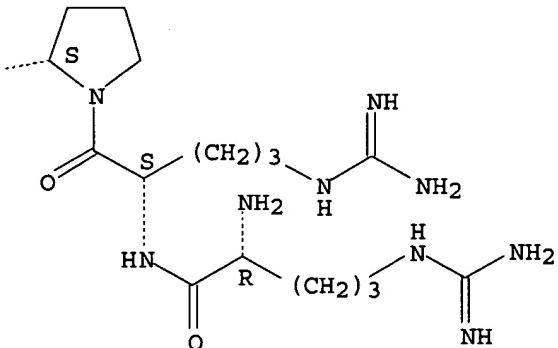
CN L-Arginine, D-arginyl-L-arginyl-L-prolyl-(4R)-4-hydroxy-L-prolylglycyl-3-(2-thienyl)-L-alanyl-L-seryl-(3R)-1,2,3,4-tetrahydro-3-isoquinolinecarbonyl-(2R,3aR,7aR)-octahydro-1H-indole-2-carbonyl- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



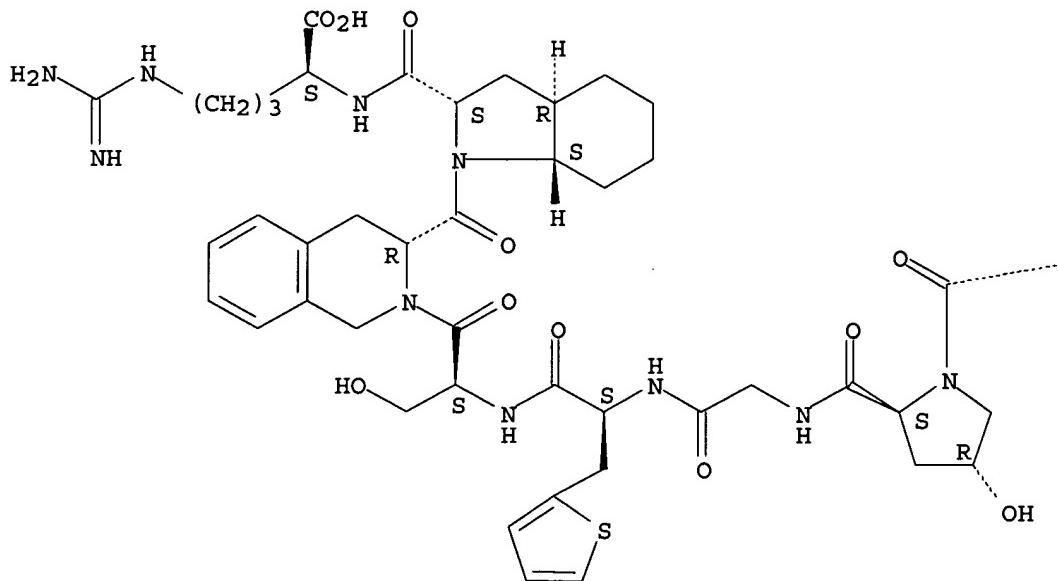
L29 ANSWER 21 OF 21 HCPLUS COPYRIGHT 2005 ACS on STN  
 AN 1991:157636 HCPLUS  
 DN 114:157636  
 ED Entered STN: 03 May 1991  
 TI New, long-acting, potent bradykinin antagonists  
 AU Lembeck, F.; Greisbacher, T.; Eckhardt, M.; Henke, S.; Breipohl, G.;  
 Knolle, J.  
 CS Dep. Exp. Clin. Pharmacol., Univ. Graz, Graz, A-8010, Austria  
 SO British Journal of Pharmacology (1991), 102(2), 297-304  
 CODEN: BJPCBM; ISSN: 0007-1188  
 DT Journal  
 LA English  
 CC 2-10 (Mammalian Hormones)  
 AB Three new bradykinin (BK) antagonists, D-Arg0-Hyp3-Thi5-D-Tic7-Oic8-BK (where Hyp = hydroxyproline; Thi =  $\beta$ -(2-thienyl)-L-alanine; D-Tic = D-(1,2,3,4-tetrahydroisoquinolin-2-yl-carbonyl) and Oic = L-[(3aS,7aS)-octahydroindol-2-yl-carbonyl]) (I), D-Arg0-Hyp3-D-Tic7-Oic8-BK (II), and Arg(Tos)1-Hyp3-Thi5-D-Tic7-Oic8-BK (where Arg(Tos) = NG-tosyl-L-arginine) (III), were tested against the effects of BK in 9 bioassay preps. including visceral smooth muscles, vasoconstriction, plasma protein extravasation, release of PGE2, bronchoconstriction, and stimulation of afferent C-fiber nociceptors. In some of these tests the effects of the new compds. were compared with those of the antagonist D-Arg0-Hyp2-Thi5,8-D-Phe7-BK (IV), described by Stewart & Vavrek (1987). For all bioassays the general rank order of potency of the compds. was I > II > III » IV. The new antagonists were long-acting; in some bioassays their effect outlasted the duration of the experiment. The inhibitory effects of the new BK antagonists were specific for BK; actions of noradrenaline, angiotensin II, acetylcholine, or histamine were unaffected by the antagonists. They did not stimulate the release of histamine or prostaglandins. An agonistic effect was observed only with very high concns. of I and II in the plasma protein extravasation test. The long duration of action of the new BK antagonists is probably due to a high and long-lasting affinity to the BK receptors. A high resistance of the antagonists to enzymic destruction may be another reason. The new BK

antagonists will be valuable tools for the investigation of the pathophysiol. role of BK. In addition they may offer a potential for therapeutic applications.

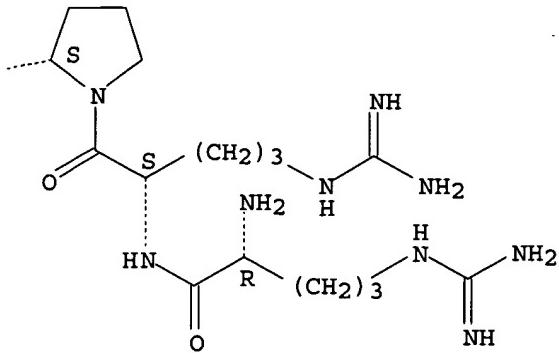
ST bradykinin analog antagonist  
 IT 58-82-2, Bradykinin  
 RL: BIOL (Biological study)  
 (antagonists, bradykinin analogs with unusual amino acids as)  
 IT 103412-36-8 133162-75-1 133162-76-2 133162-77-3  
 RL: BIOL (Biological study)  
 (as bradykinin antagonist)  
 IT 133162-75-1 133162-76-2  
 RL: BIOL (Biological study)  
 (as bradykinin antagonist)  
 RN 133162-75-1 HCAPLUS  
 CN L-Arginine, D-arginyl-L-arginyl-L-prolyl-(4R)-4-hydroxy-L-prolylglycyl-3-(2-thienyl)-L-alanyl-L-seryl-(3R)-1,2,3,4-tetrahydro-3-isoquinolinecarbonyl-(2S,3aR,7aS)-octahydro-1H-indole-2-carbonyl- (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

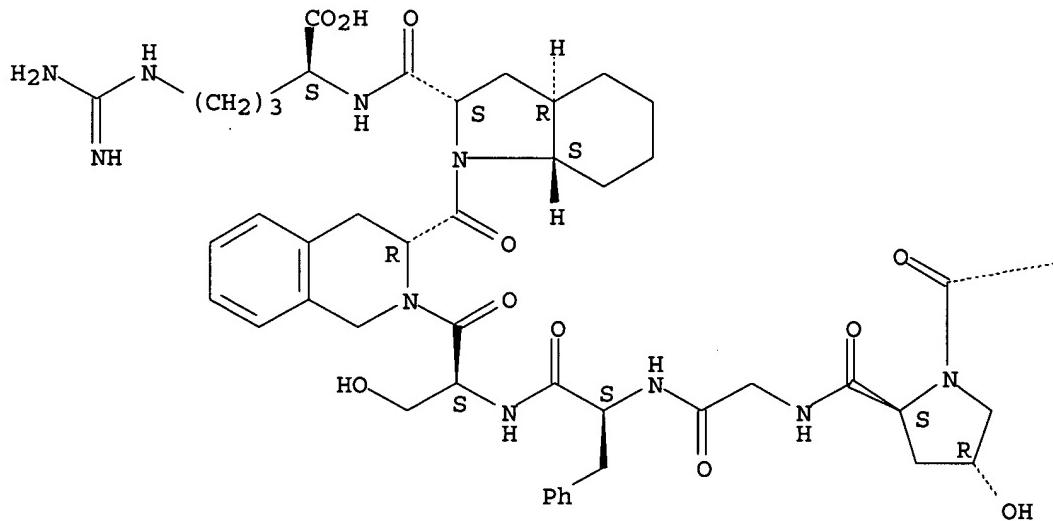


RN 133162-76-2 HCPLUS

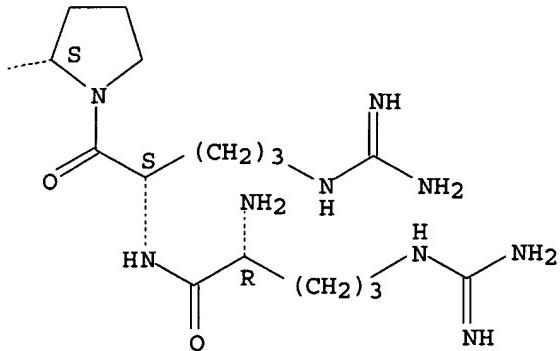
CN Bradykinin, N<sub>2</sub>-D-arginyl-3-(trans-4-hydroxy-L-proline)-7-(D-1,2,3,4-tetrahydro-3-isoquinolinecarboxylic acid)-8-[L-(2 $\alpha$ ,3 $\alpha$ ,7a $\beta$ )-octahydro-1H-indole-2-carboxylic acid]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



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 provided by InfoChem.

STRUCTURE FILE UPDATES: 26 SEP 2005 HIGHEST RN 863963-04-6  
 DICTIONARY FILE UPDATES: 26 SEP 2005 HIGHEST RN 863963-04-6

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 conducting SmartSELECT searches.

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*****
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,   *
* effective March 20, 2005. A new display format, IDERL, is now     *
* available and contains the CA role and document type information. *
*****
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Structure search iteration limits have been increased. See HELP SLIMITS  
 for details.

Experimental and calculated property data are now available. For more  
 information enter HELP PROP at an arrow prompt in the file or refer  
 to the file summary sheet on the web at:

TI Bradykinin-antagonists for the treatment of acute pancreatitis  
 IN Griesbacher, Thomas, Hitzendorf, Austria  
 Lembeck, Fred, Graz, Austria  
 PA Hoechst Aktiengesellschaft, Frankfurt am Main, Germany, Federal Republic  
 of (non-U.S. corporation)  
 PI US 5670619 19970923  
 AI US 1994-232338 19940422 (8)  
 RLI Continuation of Ser. No. US 1992-992096, filed on 17 Dec 1992, now  
 abandoned  
 PRAI EP 1991-122055 19911221  
 DT Utility  
 FS Granted  
 EXNAM Primary Examiner: Tsang, Cecilia J.; Assistant Examiner: Gupta, Anish  
 LREP Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P.  
 CLMN Number of Claims: 5  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 507  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB The invention relates to the use of bradykinin-antagonists of the  
 formula

R.sup.1 -A-B-C-E-F-G-J-K-R.sup.2

wherein R.sup.1 represents hydrogen, C.sub.1 -C.sub.4 -alkanoyl which can be substituted by mercapto, hydroxyphenyl, (4-benzoyl)phenoxy or represents (4-benzoyl)benzoyl-Lys; A represents D-Arg or D-Lys or stands for a direct bond; B represents Arg which can be substituted by NO.sub.2 or toluol-4-sulfonyl or represents Lys which can be substituted by toluol-4-sulfonyl or CO--NH--C.sub.6 H.sub.5, or stands for a direct bond; C represents Hyp-Pro-Gly, Pro-Hyp-Gly, Pro-Pro-Gly or dehydroPro-Hyp-Gly; E represents Thi, Phe, Leu or Cha; F represents Ser or Cys; G represents D-Tic, D-Phe or D-Hyp substituted by C.sub.1 -C.sub.4 -alkoxy; J represents Tic, Aoc or Oic; K represents Arg or Ahx or stands for a direct bond; R.sup.2 is hydroxy or amino; and the physiologically tolerable salts thereof for the treatments of acute pancreatitis, to pharmaceutical agents containing them and to the use thereof for the preparation of appropriate pharmaceutical compositions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 130308-49-5 130334-55-3  
 (bradykinin antagonist, for treatment of acyte pancreatitis)

L30 ANSWER 6 OF 6 USPATFULL on STN  
 AN 97:61666 USPATFULL  
 TI Peptides having bradykinin antagonist action  
 IN Henke, Stephan, Hofheim am Taunus, Germany, Federal Republic of  
 Anagnostopoulos, Hiristo, Wiesbaden, Germany, Federal Republic of  
 Breipohl, Gerhard, Frankfurt am Main, Germany, Federal Republic of  
 Knolle, Jochen, Kriftel, Germany, Federal Republic of  
 Stechl, Jens, Frankfurt am Main, Germany, Federal Republic of  
 Scholkens, Bernward, Kelkheim/Taunus, Germany, Federal Republic of  
 Fehlhaber, Hans-Wolfram, Idstein, Germany, Federal Republic of  
 Gerhards, Hermann, Hofheim am Taunus, Germany, Federal Republic of  
 Hock, Franz, Dieburg, Germany, Federal Republic of  
 PA Hoechst Aktiengesellschaft, Frankfurt am Main, Germany, Federal Republic  
 of (non-U.S. corporation)  
 PI US 5648333 19970715  
 AI US 1995-487442 19950607 (8)  
 RLI Continuation of Ser. No. US 1994-236018, filed on 2 May 1994 which is a

continuation of Ser. No. US 1993-12849, filed on 3 Feb 1993, now abandoned which is a continuation-in-part of Ser. No. US 1992-982052, filed on 25 Nov 1992, now abandoned Ser. No. Ser. No. US 1992-837090, filed on 18 Feb 1992, now abandoned And Ser. No. US 1992-969523, filed on 30 Oct 1992, now abandoned which is a continuation of Ser. No. US 1992-841766, filed on 2 Mar 1992, now abandoned which is a continuation of Ser. No. US 1991-690297, filed on 24 Apr 1991, now abandoned which is a continuation-in-part of Ser. No. US 1990-565270, filed on 10 Aug 1990, now abandoned which is a continuation-in-part of Ser. No. US 1989-374162, filed on 30 Jun 1989, now abandoned , said Ser. No. US -982052 which is a continuation of Ser. No. US 1991-746149, filed on 14 Aug 1991, now abandoned which is a continuation-in-part of Ser. No. US -374162 , said Ser. No. US -837090 which is a continuation-in-part of Ser. No. US -565270 And Ser. No. US -746149

PRAI DE 1988-3839581 19881124  
 DE 1989-3916291 19890519  
 DE 1989-3926225 19890603  
 DE 1989-3926822 19890814  
 DE 1990-4013270 19900426

DT Utility  
 FS Granted

EXNAM Primary Examiner: Tsang, Cecilia J.; Assistant Examiner: Touzeau, P.  
 Lynn

LREP Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P.

CLMN Number of Claims: 33

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 2227

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Peptides of the formula I

A-B-C-E-F-K-P-G-M-F'-I

(I),

wherein the terms A, B, C, E, F, K, P, G, M, F', and I are defined in the specification, have bradykinin antagonist action. Their therapeutic utility includes all pathological states which are mediated, caused or supported by bradykinin and bradykinin-related peptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 130308-49-5P 130334-55-3P 130404-96-5P  
 133162-75-1P 193618-59-6P 193618-60-9P  
 193618-61-0P 193618-62-1P 193618-63-2P  
 193618-64-3P 193618-68-7P  
 (peptides having bradykinin antagonist action)  
 IT 130308-52-0P 130308-53-1P  
 (peptides having bradykinin antagonist action)

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L29 ANSWER 1 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2004:681587 HCAPLUS  
 DN 141:185137  
 ED Entered STN: 20 Aug 2004  
 TI Use of bradykinin B2 receptor antagonists for treating osteoarthritis and other matrix metalloproteinase-associated diseases  
 IN Michaelis, Martin; Rudolphi, Karl  
 PA Aventis Pharma Deutschland G.m.b.h., Germany  
 SO PCT Int. Appl., 16 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA German  
 IC ICM A61K038-04  
 ICS A61P019-00  
 CC 1-12 (Pharmacology)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004069266	A2	20040819	WO 2004-EP550	20040123 <--
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	US 2004248809	A1	20041209	US 2004-773772	20040206 <--
PRAI	DE 2003-10304994	A	20030207 <--		
	US 2003-480246P	P	20030620 <--		

#### CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES	
WO 2004069266	ICM	A61K038-04	
	ICS	A61P019-00	
WO 2004069266	ECLA	A61K038/08	<--
DE 10304994	ECLA	A61K038/08	<--
US 2004248809	NCL	514/015.000	<--
	ECLA	A61K038/08	<--

OS MARPAT 141:185137

AB Peptides that have a bradykinin-antagonistic effect are suitable for the production of drugs for use in the prophylaxis and therapy of diseases whose progression is associated with an increased activity of matrix metalloproteinases. These diseases include degenerative articular diseases, for example osteoarthritis, spondylosis and chondroporosis after joint trauma or prolonged joint immobilization after meniscus or patella injuries or ruptures of a ligament.

ST bradykinin B2 antagonist degenerative articular disease; osteoarthritis spondylosis chondroporosis bradykinin receptor antagonist; matrix metalloproteinase disease bradykinin B2 antagonist

IT Bradykinin receptors  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (B2; bradykinin B2 receptor antagonists for treating osteoarthritis and other matrix metalloproteinase-associated diseases)

IT Animal cell line  
 (SW1353; bradykinin B2 receptor antagonists for treating osteoarthritis and other matrix metalloproteinase-associated diseases)

IT Antiarthritics  
 Human  
 Osteoarthritis  
 (bradykinin B2 receptor antagonists for treating osteoarthritis and other matrix metalloproteinase-associated diseases)

IT Cartilage, disease  
 (degeneration; bradykinin B2 receptor antagonists for treating osteoarthritis and other matrix metalloproteinase-associated diseases)

IT Joint, anatomical  
 (disease, degeneration; bradykinin B2 receptor antagonists for treating osteoarthritis and other matrix metalloproteinase-associated diseases)

IT Drug delivery systems  
 (injections, i.p.; bradykinin B2 receptor antagonists for treating osteoarthritis and other matrix metalloproteinase-associated diseases)

IT Drug delivery systems  
 (injections, i.v.; bradykinin B2 receptor antagonists for treating osteoarthritis and other matrix metalloproteinase-associated diseases)

IT Drug delivery systems  
 (injections, intraarticular; bradykinin B2 receptor antagonists for treating osteoarthritis and other matrix metalloproteinase-associated diseases)

IT Drug delivery systems  
 (injections, s.c.; bradykinin B2 receptor antagonists for treating osteoarthritis and other matrix metalloproteinase-associated diseases)

IT Disease, animal  
 (joint degeneration; bradykinin B2 receptor antagonists for treating osteoarthritis and other matrix metalloproteinase-associated diseases)

IT Immobilization, animal  
 (joint; bradykinin B2 receptor antagonists for treating osteoarthritis and other matrix metalloproteinase-associated diseases)

IT Joint, anatomical  
 (meniscus, injury; bradykinin B2 receptor antagonists for treating osteoarthritis and other matrix metalloproteinase-associated diseases)

IT Bone  
 (patella, injury; bradykinin B2 receptor antagonists for treating osteoarthritis and other matrix metalloproteinase-associated diseases)

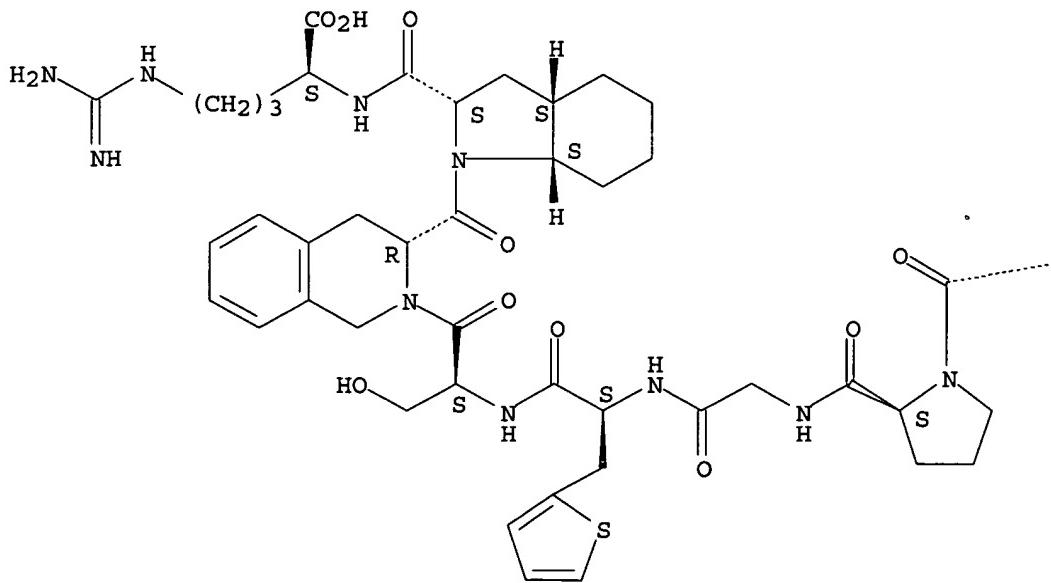
IT Inflammation  
 Spinal column, disease  
 (spondylitis; bradykinin B2 receptor antagonists for treating osteoarthritis and other matrix metalloproteinase-associated diseases)

IT Ligament  
 (torn; bradykinin B2 receptor antagonists for treating osteoarthritis)

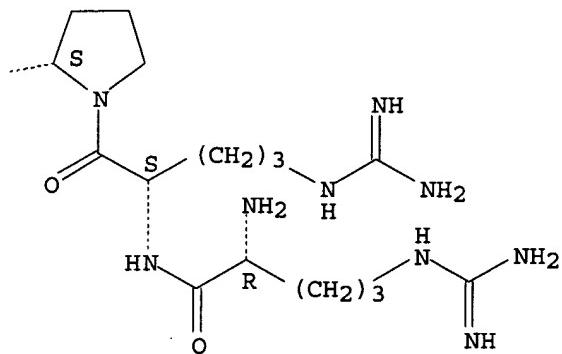
- and other matrix metalloproteinase-associated diseases)
- IT Drug delivery systems  
 (transdermal; bradykinin B2 receptor antagonists for treating osteoarthritis and other matrix metalloproteinase-associated diseases)
- IT Joint, anatomical  
 (trauma; bradykinin B2 receptor antagonists for treating osteoarthritis and other matrix metalloproteinase-associated diseases)
- IT 79955-99-0, Matrix metalloproteinase 3  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (bradykinin B2 receptor antagonists for treating osteoarthritis and other matrix metalloproteinase-associated diseases)
- IT 130308-49-5 199870-83-2 740808-61-1  
 740808-62-2 740808-63-3 740808-64-4  
 RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (bradykinin B2 receptor antagonists for treating osteoarthritis and other matrix metalloproteinase-associated diseases)
- IT 130308-49-5 199870-83-2 740808-61-1  
 740808-62-2 740808-63-3 740808-64-4  
 RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (bradykinin B2 receptor antagonists for treating osteoarthritis and other matrix metalloproteinase-associated diseases)
- IT 130308-49-5 199870-83-2 740808-61-1  
 740808-62-2 740808-63-3 740808-64-4  
 RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (bradykinin B2 receptor antagonists for treating osteoarthritis and other matrix metalloproteinase-associated diseases)
- RN 130308-49-5 HCPLUS
- CN L-Arginine, D-arginyl-L-arginyll-L-prolyl-L-prolylglycyl-3-(2-thienyl)-L-alanyl-L-seryl-(3R)-1,2,3,4-tetrahydro-3-isooquinolinecarbonyl-(2S,3aS,7aS)-octahydro-1H-indole-2-carbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

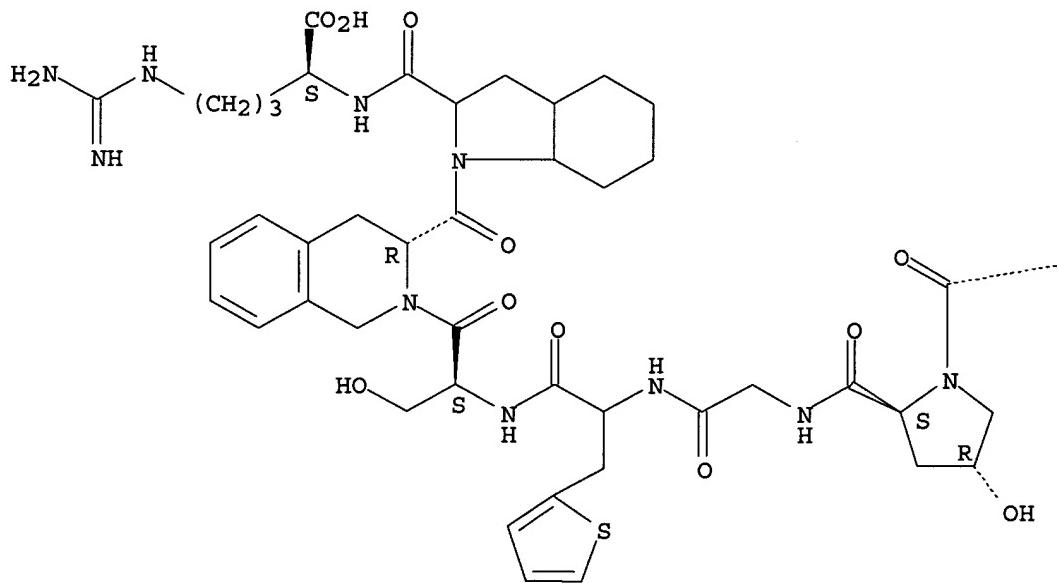


RN 199870-83-2 HCAPLUS

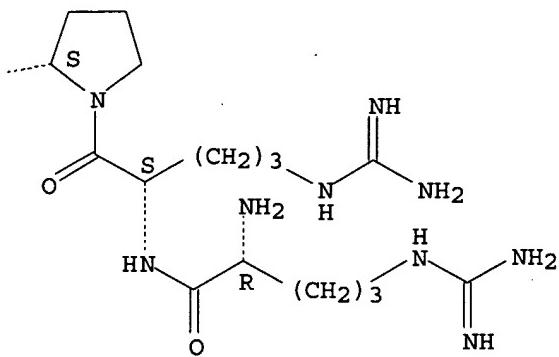
CN L-Arginine, D-arginyl-L-arginyl-L-prolyl-(4R)-4-hydroxy-L-prolylglycyl-3-(2-thienyl)alanyl-L-seryl-(3R)-1,2,3,4-tetrahydro-3-isoquinolinecarbonyloctahydro-1H-indole-2-carbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

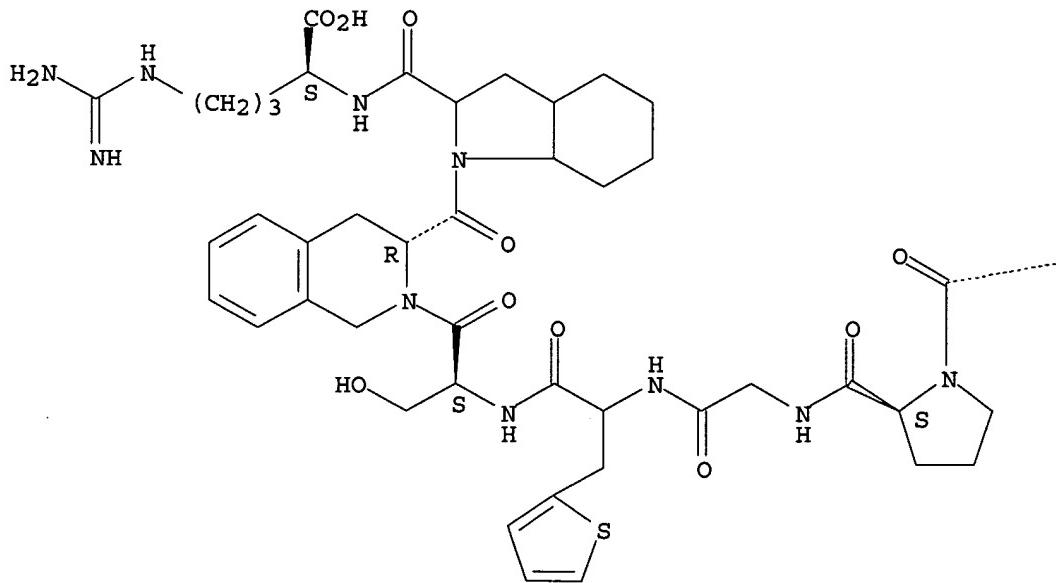


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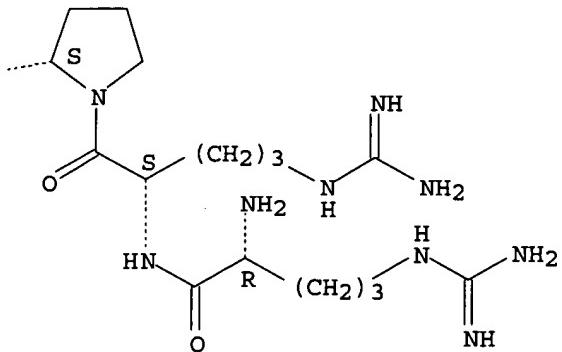
CN L-Arginine, D-arginyl-L-arginyl-L-prolyl-L-prolylglycyl-3-(2-thienyl)alanyl-L-seryl-(3R)-1,2,3,4-tetrahydro-3-isoquinolinecarbonyloctahydro-1H-indole-2-carbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

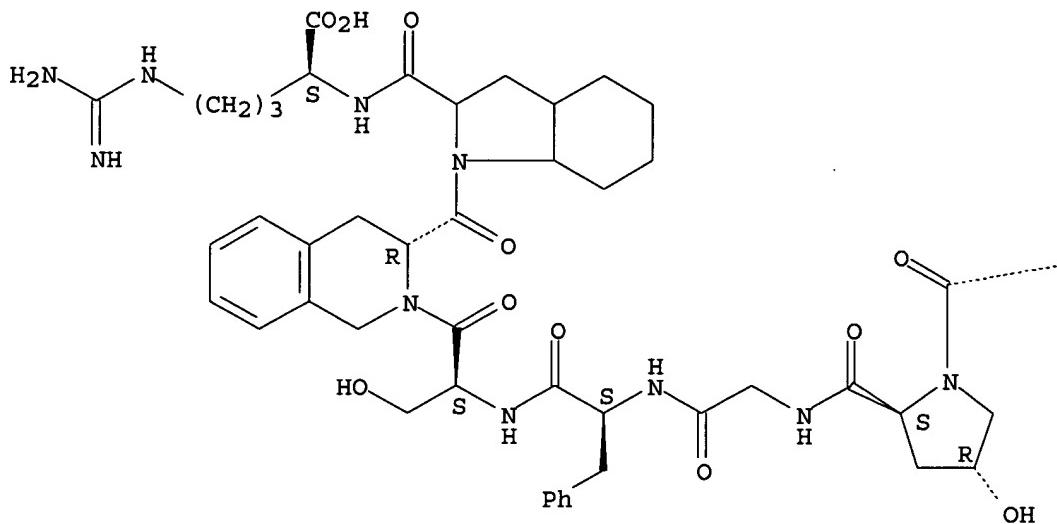


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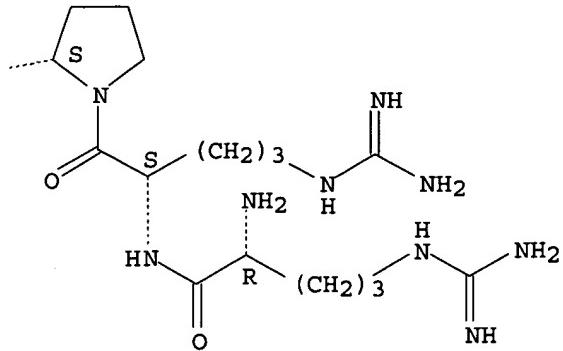
CN L-Arginine, D-arginyl-L-arginyl-L-prolyl-(4R)-4-hydroxy-L-prolylglycyl-L-phenylalanyl-L-seryl-(3R)-1,2,3,4-tetrahydro-3-isoquinolinecarbonyloctahydro-1H-indole-2-carbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

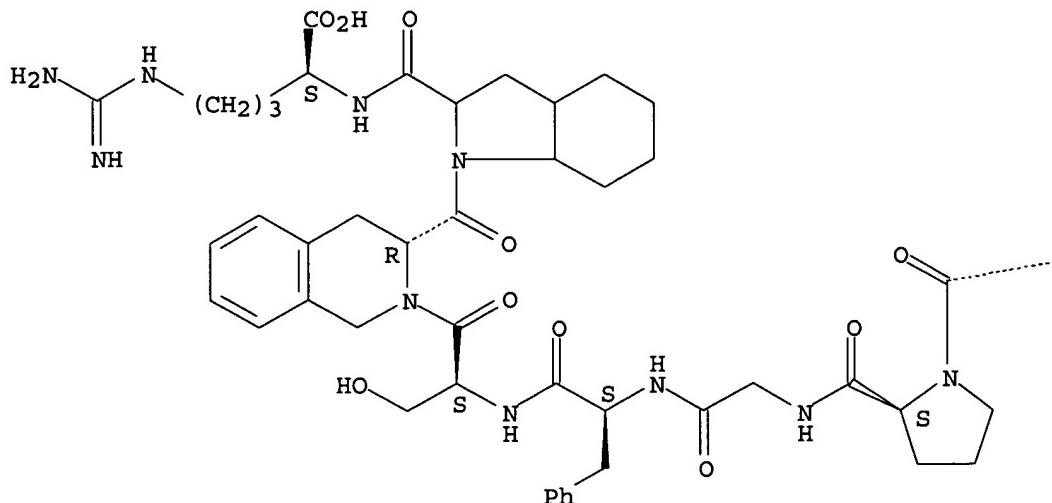


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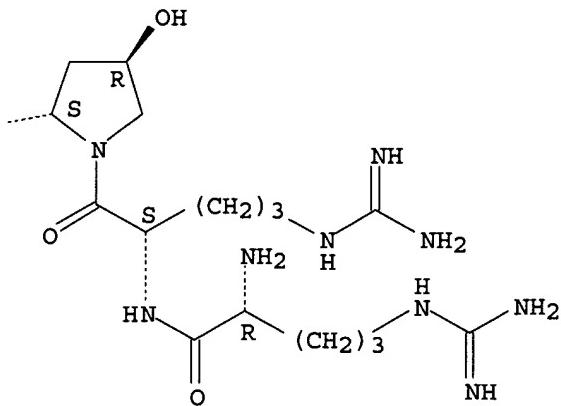
CN L-Arginine, D-arginyl-L-arginyl-(4R)-4-hydroxy-L-prolyl-L-prolylglycyl-L-phenylalanyl-L-seryl-(3R)-1,2,3,4-tetrahydro-3-isoquinolinecarbonyloctahydro-1H-indole-2-carbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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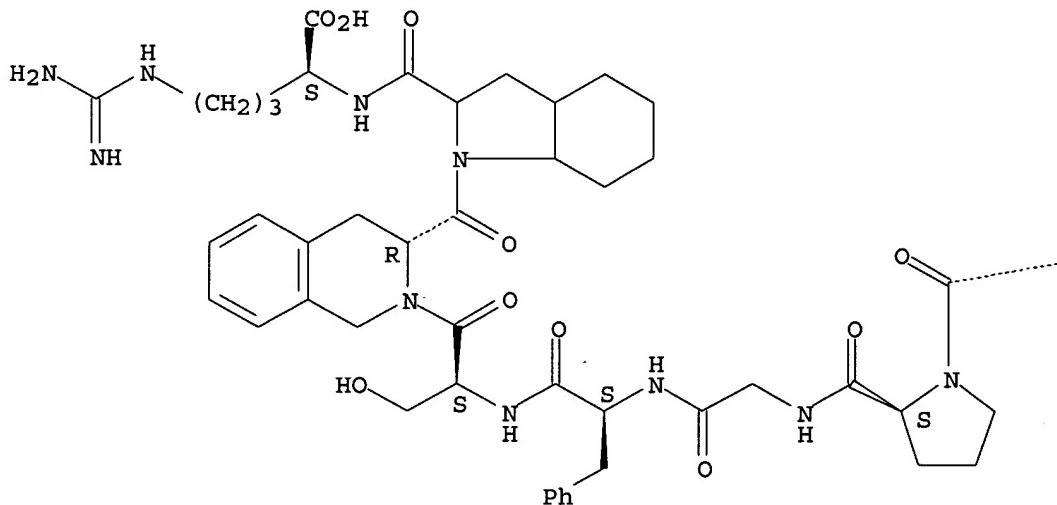


RN 740808-64-4 HCPLUS

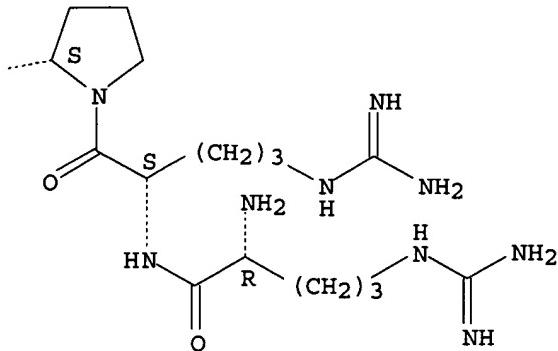
CN L-Arginine, D-arginyl-L-arginyl-L-prolyl-L-prolylglycyl-L-phenylalanyl-L-seryl-(3R)-1,2,3,4-tetrahydro-3-isouquinolinecarbonyloctahydro-1H-indole-2-carbonyl-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L29 ANSWER 2 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2004:28296 HCAPLUS  
 DN 141:151157  
 ED Entered STN: 14 Jan 2004  
 TI New constrained amino acids for the study of the role of the basic residues in bradykinin antagonists  
 AU Alcaro, Maria C.; Terzani, Tullio; Nuti, Francesca; Chelli, Mario; Machetti, Fabrizio; Quartara, Laura; Patacchini, Riccardo; Meini, Stefania; Giuliani, Sandro; Brandi, Alberto; Rovero, Paolo; Papini, Anna M.  
 CS Dipartimento di Chimica Organica "Ugo Schiff", Universita di Firenze and CNR-ICCOM, Sesto Fiorentino (FI), I-50019, Italy  
 SO Peptides 2002, Proceedings of the European Peptide Symposium, 27th, Sorrento, Italy, Aug. 31-Sept. 6, 2002 (2002), 18-19.  
 Editor(s): Benedetti, Ettore; Pedone, Carlo. Publisher: Edizioni Ziino, Castellammare di Stabia, Italy.  
 CODEN: 69EYXG; ISBN: 88-900948-1-8  
 DT Conference  
 LA English  
 CC 2-2 (Mammalian Hormones)  
 Section cross-reference(s): 34  
 AB Several antagonists for the bradykinin B2 receptor have been developed. Among these the second-generation peptide HOE 140 (H-D-Arg0-Arg1-Pro2-Hyp3-Gly4-Thi5-Ser6-D-Tic7-Oic8-Arg9-OH) represents the model for the preparation of highly potent compds. To investigate the role of the basic residues H-D-Arg0-Arg1 and Arg9-OH in the activity of HOE 140, a series of HOE 140 peptide analogs modified at the N- and C-terminal positions were prepared and tested for bradykinin B2 receptor antagonist activity. All the peptides showed a less potent antagonist activity at the B2 receptor than HOE 140. It seems that for a good binding to the B2 receptor the amino acids responsible for the basic interaction should possess an aliphatic chain whose length is longer than Orn and shorter than Lys, and whose direction is that imposed by an L-stereochem. The preparation of Fmoc-Api(Boc)-OH is described.  
 ST HOE 140 peptide analog bradykinin B2 receptor antagonist

IT Bradykinin receptors  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (B2; new constrained amino acids for study of role of basic residues in peptide analogs of HOE 140 as bradykinin antagonists)

IT Structure-activity relationship  
 (bradykinin-inhibiting; new constrained amino acids for study of role of basic residues in peptide analogs of HOE 140 as bradykinin antagonists)

IT 58-82-2, Bradykinin  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (new constrained amino acids for study of role of basic residues in peptide analogs of HOE 140 as bradykinin antagonists)

IT 130389-50-3, MEN 11661 138614-30-9, HOE 140 193618-62-1, MEN  
 11646 506441-29-8, MEN 11670 729558-81-0, MEN 11632 729558-82-1, MEN  
 11659 729558-83-2, MEN 11658 729558-84-3, MEN 11747 729558-85-4, MEN  
 11748 729558-86-5, MEN 11692 729558-87-6, MEN 11746 729558-88-7, MEN  
 11766 729558-89-8, TTBK  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (new constrained amino acids for study of role of basic residues in peptide analogs of HOE 140 as bradykinin antagonists)

IT 357154-19-9  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (new constrained amino acids for study of role of basic residues in peptide analogs of HOE 140 as bradykinin antagonists)

IT 728946-36-9P 728946-37-0P 728946-38-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (new constrained amino acids for study of role of basic residues in peptide analogs of HOE 140 as bradykinin antagonists)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Guba, W; J Am Chem Soc 1994, V116, P7532 HCPLUS
- (2) Kennedy, K; J Peptide Res 2002, V59, P139 HCPLUS
- (3) Machetti, F; Tetrahedron 2001, V57, P4995 HCPLUS
- (4) York, E; Peptides: The Wave of the Future (Proceedings of the 2nd International Peptide Symposium and the 17th American Peptide Symposium) 2001, P721 HCPLUS

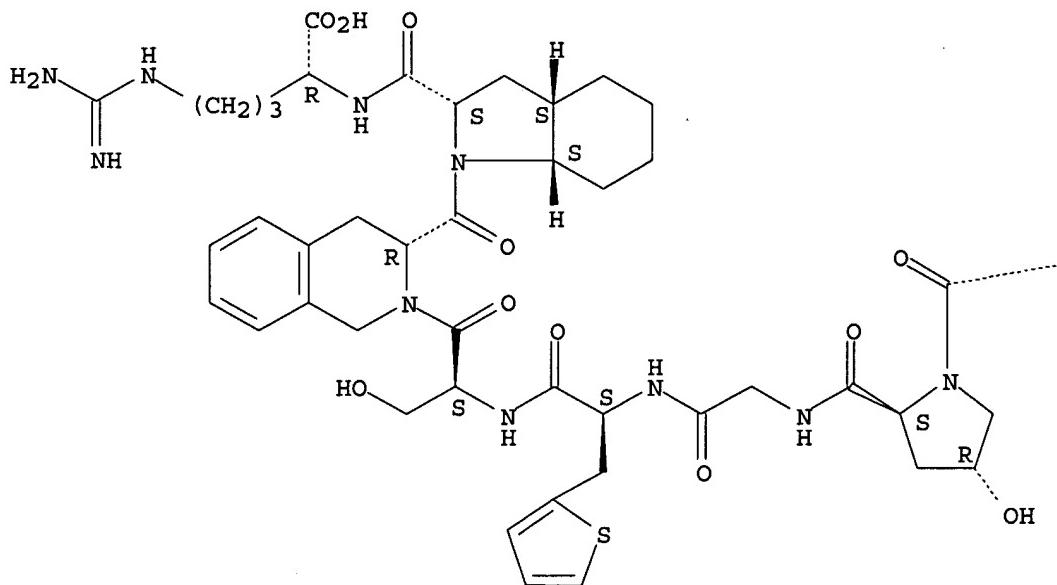
IT 193618-62-1, MEN 11646  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (new constrained amino acids for study of role of basic residues in peptide analogs of HOE 140 as bradykinin antagonists)

RN 193618-62-1 HCPLUS

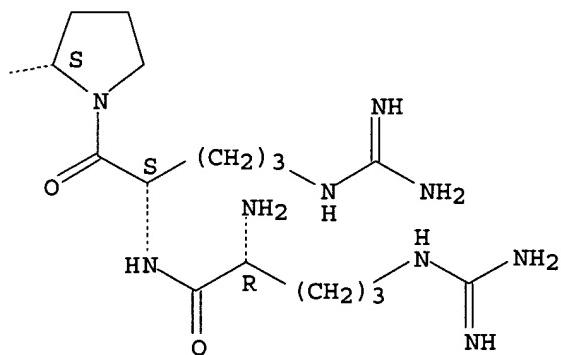
CN D-Arginine, D-arginyl-L-arginyl-L-prolyl-(4R)-4-hydroxy-L-prolylglycyl-3-(2-thienyl)-L-alanyl-L-seryl-(3R)-1,2,3,4-tetrahydro-3-isoquinolinecarbonyl-(2S,3aS,7aS)-octahydro-1H-indole-2-carbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L29 ANSWER 3 OF 21 HCPLUS COPYRIGHT 2005 ACS on STN  
 AN 2003:737369 HCPLUS  
 DN 139:255368  
 ED Entered STN: 19 Sep 2003  
 TI Prokinetic agents for treating gastric hypomotility and related disorders  
 IN Watson, John W.; Andrews, Paul L. R.; Woods, Anthony J.  
 PA USA  
 SO U.S. Pat. Appl. Publ., 57 pp.

CODEN: USXXCO

DT Patent

LA English

IC ICM A61K031-542

ICS A61K031-538; A61K031-497; A61K031-541; A61K031-53; A61K031-52;  
A61K031-517INCL 514224200; 514242000; 514263200; 514254060; 514251000; 514255050;  
514233500; 514300000; 514256000; 514266230

CC 1-9 (Pharmacology)

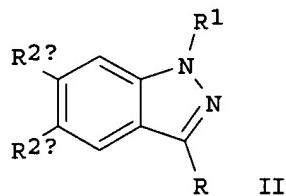
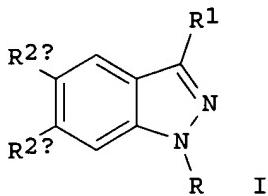
Section cross-reference(s): 28, 63

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2003176421	A1	20030918	US 1999-476253	19991230 <--
PRAI US 1999-476253		19991230	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2003176421	ICM	A61K031-542
	ICS	A61K031-538; A61K031-497; A61K031-541; A61K031-53; A61K031-52; A61K031-517
	INCL	514224200; 514242000; 514263200; 514254060; 514251000; 514255050; 514233500; 514300000; 514256000; 514266230 514/224.200 <--
US 2003176421	NCL	
OS MARPAT 139:255368		
GI		



AB Stasis is treated or prevented in all or any part or parts of the stomach of a patient, especially a human patient, in need of such treatment, where said stasis results from hypomotility in the stomach, particularly gastric hypomotility with delayed emptying of the liquid and/or solid contents of the stomach. Gastric or gastrointestinal disorders are also treated which are characterized by one or more symptoms selected from pain, nausea, vomiting, heartburn, postprandial discomfort, indigestion and gastroesophageal reflux. Such treatment or prevention is achieved by administering to the patient a therapeutically effective amount of an inhibitor of phosphodiesterase-4 (PDE4), including isoenzyme subtypes thereof, sufficient to treat or prevent such hypomotility or gastric or gastrointestinal disorder in said patient. The PDE4 inhibitor comprises I or II [preferably R = cyclopentyl or cyclohexyl; R1 = (C1-C2) alkyl; one of R2a and R2b = H and the other = Q; dashed line = single bond; m = 0, R113 and R114 are cis to each other; R113 = CN, R115 = H, R114 = carboxy, -CH2OH, -CH2C(=O)NH2]. Pharmaceutical compns. are also described which are useful for carrying out the above-mentioned methods of treatment and prevention, and which are also useful in the treatment of a gastric or gastrointestinal disorder in a patient which comprises with respect to said patient, (i) a sign or concomitant of diabetic neuropathy, anorexia

nervosa, achlorhydria, gastrointestinal surgery, post-surgical recovery in the period of emergence from general anesthesia; or the administration of morphine and morphine-like opioids; (ii) a secondary aspect of a primary disease or disorder in said patient which is organic, wherein said disease or disorder involves particularly a gastroenteric or gastroesophageal organ or tissue, or an organ or tissue of the central nervous system of said patient; or (iii) an adverse side effect of a different therapeutic agent administered to said patient in the course of treating another unrelated disease or disorder in said patient.

- ST prokinetic agent treatment gastric hypomotility; phosphodiesterase 4 inhibitor prokinetic agent gastrointestinal disorder
- IT Antihistamines
  - (H1, pharmaceutical containing phosphodiesterase-4 inhibitor and; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)
- IT Stomach, disease
  - (an acidity, gastrointestinal disorder in relation to; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)
- IT Enkephalins
  - Opioids
    - RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
      - (analgesics, as auxiliary therapeutic agents; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)
- IT Appetite
  - (anorexia nervosa, gastrointestinal disorder in relation to; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)
- IT Corticosteroids, biological studies
  - RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
    - (anti-inflammatory, as auxiliary therapeutic agents; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)
- IT Interleukin 1
  - Interleukin 10
  - Interleukin 11
  - Interleukin 12
  - Interleukin 2
  - Interleukin 3
  - Interleukin 4
  - Interleukin 5
  - Interleukin 6
  - Interleukin 7
  - Interleukin 8
  - Interleukin 9
- IT Cholinergic antagonists
  - Leukotriene antagonists
  - Thromboxane receptor antagonists
    - (as auxiliary therapeutic agents; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)
- IT Cytokines

## Interleukins

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(as auxiliary therapeutic agents; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT Nausea

Pain

Vomiting

(as symptom of gastrointestinal disorders; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT Diuretics

(causing hypokalemia, pharmaceutical containing phosphodiesterase-4 inhibitor and; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT Inflammation

(chronic, autocoids for treatment of pain and, as auxiliary therapeutic agents; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT Anti-inflammatory agents

(corticosteroids, as auxiliary therapeutic agents; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT Nerve, disease

(diabetic neuropathy, gastrointestinal disorder in relation to; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT Postprandial period

(discomfort, as symptom of gastrointestinal disorders; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT Gastrointestinal motility

(disorder, dysmotility; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT Opioids

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(endogenous, proteinaceous analgesics, as auxiliary therapeutic agents; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT Nervous system agents

(ganglionic blocking agents, pharmaceutical containing phosphodiesterase-4 inhibitor and; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT Digestive tract, disease

(gastroesophageal reflux, as symptom of gastrointestinal disorders; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT Therapy

(gastrointestinal disorder from; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT Surgery

(gastrointestinal, gastrointestinal disorder in relation to; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT Anesthesia

(general, post-surgical recovery in period of emergence from, gastrointestinal disorder in relation to; prokinetic

phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT Digestive tract, disease  
(indigestion, as symptom of gastrointestinal disorders; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT Drug delivery systems  
(inhalants, anti-inflammatory corticosteroids, as auxiliary therapeutic agents; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT Drug delivery systems  
(injections, anti-inflammatory corticosteroids, as auxiliary therapeutic agents; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT Opioids  
RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)  
(morphine-like, gastrointestinal disorder from; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT Digestive tract, disease  
Stomach, disease  
(motility disorders; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT Drug delivery systems  
(nasal, anti-inflammatory corticosteroids, as auxiliary therapeutic agents; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT Analgesics  
Anti-inflammatory agents  
Antipyretics  
(nonsteroidal, as auxiliary therapeutic agents; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT Gastric emptying  
(of liqs. and/or solids, delayed; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT Drug delivery systems  
(ophthalmic, anti-inflammatory corticosteroids, as auxiliary therapeutic agents; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT Proteins  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(opioid analgesics, as auxiliary therapeutic agents; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT Analgesics  
(opioid, as auxiliary therapeutic agents; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT Drug delivery systems  
(oral, anti-inflammatory corticosteroids, as auxiliary therapeutic agents; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT Antacids  
Antidiarrheals  
Antiparkinsonian agents  
Laxatives

- Muscle relaxants**  
 (pharmaceutical containing phosphodiesterase-4 inhibitor and; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)
- IT Corticosteroids, biological studies  
**Heavy metals**  
 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (pharmaceutical containing phosphodiesterase-4 inhibitor and; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)
- IT Drug delivery systems  
**Gastrointestinal motility**  
**Human**  
**Mammalia**  
**Prokinetic agents**  
 (prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)
- IT Hormone antagonists  
 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (prostaglandin antagonists, analgesics, pharmaceutical containing phosphodiesterase-4 inhibitor and; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)
- IT Digestive tract, disease  
 (pyrosis, as symptom of gastrointestinal disorders; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)
- IT Drug delivery systems  
 (topical, anti-inflammatory corticosteroids, as auxiliary therapeutic agents; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)
- IT Anti-inflammatory agents  
 (topical, corticosteroids, as auxiliary therapeutic agents; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)
- IT Antidepressants  
 (tricyclic, with anticholinergic effect, pharmaceutical containing phosphodiesterase-4 inhibitor and; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)
- IT Antihistamines  
 (with anticholinergic effect, pharmaceutical containing phosphodiesterase-4 inhibitor and; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)
- IT Opioid receptors  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 ( $\kappa$ -opioid, proteinaceous opioid analgesic agonists and antagonists of, as auxiliary therapeutic agents; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)
- IT Opioid antagonists  
 ( $\kappa$ -opioid, proteinaceous opioid analgesics, as auxiliary therapeutic agents; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)
- IT Opioid receptors  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 ( $\delta$ -opioid, proteinaceous opioid analgesic agonists and antagonists of, as auxiliary therapeutic agents; prokinetic

phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT Opioid antagonists  
 (δ-opioid, proteinaceous opioid analgesics, as auxiliary therapeutic agents; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT Opioid receptors  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (μ-opioid, proteinaceous opioid analgesic agonists and antagonists of, as auxiliary therapeutic agents; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT Opioid antagonists  
 (μ-opioid, proteinaceous opioid analgesics, as auxiliary therapeutic agents; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT 199171-80-7 199171-81-8 199171-82-9 199171-83-0 199171-84-1  
 199171-85-2 199171-86-3 199171-87-4 199171-88-5 199171-89-6  
 199171-90-9 199171-91-0 199171-92-1 224048-00-4 224048-01-5  
 224048-02-6 224048-03-7 224048-05-9 224048-06-0 224048-07-1  
 224048-08-2 224048-09-3 224048-10-6 224048-11-7 224048-13-9  
 224048-14-0 224048-15-1 224048-21-9 224048-23-1 284465-42-5  
 RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (PDE4 inhibitor; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT 60118-07-2D, Endorphin, compds. 74913-18-1D, Dynorphin, compds.  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (analgesics, as auxiliary therapeutic agents; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT 471-34-1, Calcium carbonate, biological studies 21645-51-2, Aluminum hydroxide, biological studies  
 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (antacids, pharmaceutical containing phosphodiesterase-4 inhibitor and; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT 15958-92-6, 1-8-Bradykinin 58569-55-4, (Met5)enkephalin 58822-25-6,  
 1-5-β-Neoendorphin (human) 63631-40-3, (D-Ala2,D-Leu5)enkephalin  
 64695-06-3 71800-36-7, 1-9-Kallidin 73742-30-0 74135-04-9,  
 Morphiceptin 75644-90-5, (D-Ser2,Leu5)enkephalin-Thr6 78123-71-4  
 83397-56-2 88373-73-3, (D-Pen2,D-Pen5)enkephalin 97825-00-8  
 110881-59-9 122752-15-2, Deltorphin C 122752-16-3, Deltorphin B  
 288570-66-1 603969-58-0  
 RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (as auxiliary therapeutic agent; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)

IT 50-02-2, Dexamethasone 50-03-3, Cortisol acetate 50-04-4, Cortisone acetate 50-13-5, Meperidine hydrochloride 50-23-7, Cortisol 50-24-8, Prednisolone 50-33-9, Phenylbutazone, biological studies 50-78-2, Aspirin 52-21-1, Prednisolone acetate 52-28-8, Codeine phosphate 53-03-2, Prednisone 53-36-1, Methylprednisolone acetate 53-86-1, Indometheacin 54-21-7, Sodium salicylate 58-82-2, Bradykinin 61-68-7, Mefenamic acid 64-31-3, Morphine sulfate 67-73-2, Fluocinolone acetonide 67-78-7, Triamcinolone diacetate 71-68-1, Hydromorphone hydrochloride 76-25-5, Triamcinolone acetonide 76-42-6, Oxycodone

76-57-3, Codeine 83-43-2, Methylprednisolone 103-90-2, Acetaminophen  
 119-36-8, Methyl salicylate 124-90-3, Oxycodone hydrochloride  
 124-94-7, Triamcinolone 125-02-0, Prednisolone sodium phosphate  
 125-04-2, Cortisol sodium succinate 125-72-4, Levorphanol tartrate  
 126-12-5, Anileridine hydrochloride 144-14-9, Anileridine 151-73-5,  
 Betamethasone sodium phosphate 342-10-9, Kallidin 356-12-7,  
 Fluocinonide 357-07-3, Oxymorphone hydrochloride 378-44-9,  
 Betamethasone 382-67-2, Desoximetasone 426-13-1, Fluorometholone  
 508-99-6, Cortisol cypionate 509-74-0, Methadyl acetate 514-36-3,  
 Fludrocortisone acetate 530-78-9, Flufenamic acid 552-94-3, Salsalate  
 599-79-1, Sulfasalazine 638-94-8, Desonide 644-62-2, Meclofenamic acid  
 990-73-8, Fentanyl citrate 1095-90-5, Methadone hydrochloride  
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 dipropionate 5593-20-4, Betamethasone dipropionate 5611-51-8,  
 Triamcinolone hexacetonide 6000-74-4, Cortisol sodium phosphate  
 6677-99-2 6678-00-8 7681-14-3, Prednisolone tebutate 8064-08-2  
 13539-59-8, Apazone 13710-19-5, Tolfenamic acid 15307-86-5, Diclofenac  
 15687-27-1, Ibuprofen 15722-48-2, Olsalazine 21256-18-8, Oxaprozin  
 22071-15-4, Ketoprofen 22204-53-1, Naproxen 22254-24-6, Ipratropium  
 bromide 22298-29-9, Betamethasone benzoate 22494-42-4, Diflunisal  
 25122-46-7, Clobetasol propionate 25333-72-6, Oxycodone terephthalate  
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 diacetate 34097-16-0, Clocortolone pivalate 36322-90-4, Piroxicam  
 38194-50-2, Sulindac 41340-25-4, Etodolac 42924-53-8, Nabumetone  
 43033-72-3, Levomethadyl acetate hydrochloride 51022-69-6, Amcinonide  
 51803-78-2, Nimesulide 59804-37-4, Tenoxicam 60561-17-3, Sufentanil  
 citrate 61380-27-6, Carfentanil citrate 61380-41-4, Lofentanil oxalate  
 64425-90-7, Choline magnesium trisalicylate, biological studies  
 66734-13-2, Alclometasone dipropionate 68616-83-1, Pentamorphone  
 69049-06-5, Alfentanil hydrochloride 69671-17-6,  $\alpha$ -Neoendorphin  
 71125-38-7, Meloxicam 74103-06-3, Ketorolac 77752-00-2,  
 $\beta$ -Neoendorphin 80809-81-0, Docebenone 83869-56-1,  
 Granulocyte-macrophage colony-stimulating factor 83919-23-7, Mometasone  
 furoate 85006-82-2, Dynorphin B 88107-10-2, Tomelukast 88161-22-2,  
 Dynorphin A 96565-55-8, Ablukast sodium 96566-25-5, Ablukast  
 98116-53-1, Sulukast 103177-37-3, Pranlukast 107753-78-6, Zafirlukast  
 111406-87-2, Zileuton 111974-60-8, Ritolukast 112665-43-7, Seratrodast  
 112964-97-3, Ocfentanil hydrochloride 117268-95-8, Brifentanil  
 hydrochloride 120210-48-2, Tenidap 120443-16-5, Verlukast  
 128312-51-6, Cinalukast 132956-22-0, Enazadrem phosphate 143011-72-7,  
 Granulocyte-colony stimulating factor 147432-77-7, Ontazolast  
 151581-24-7, Iralukast 151767-02-1, Montelukast sodium 385390-37-4,  
 Pobilukast edamine  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)

(as auxiliary therapeutic agent; prokinetic phosphodiesterase-4  
 inhibitor agents for treating gastric hypomotility and related  
 disorders)

IT 64-19-7D, Acetic acid, hetoaryl derivs. 69-72-7D, Salicylic acid,  
 derivs. 79-09-4D, Propionic acid, aryl compds. 87-51-4D, Indole acetic  
 acid, derivs. 118-92-3D, Anthranilic acid, derivs. 123-30-8D, derivs.  
 62683-29-8, Colony-stimulating factor

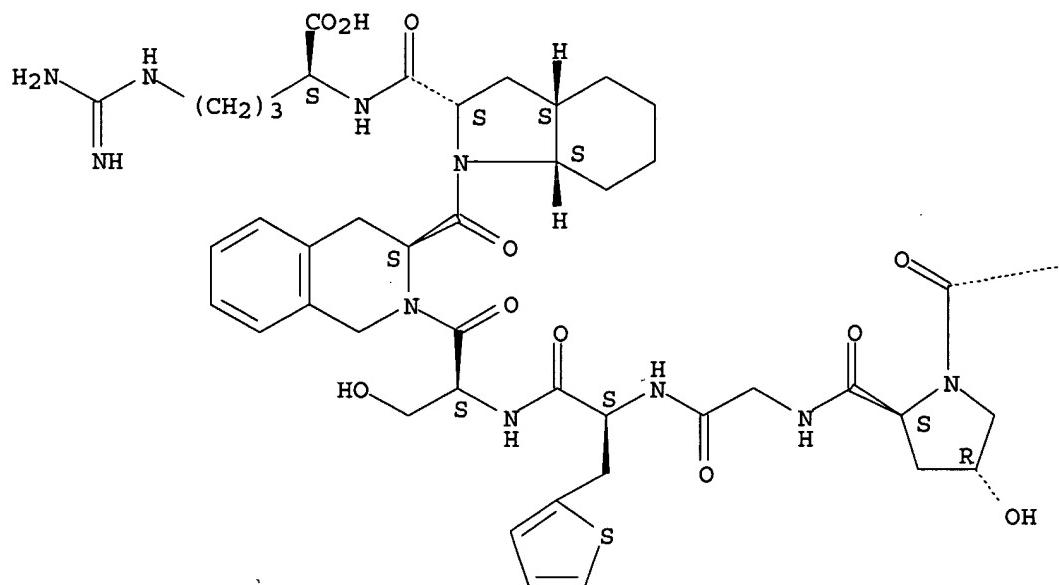
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)

(as auxiliary therapeutic agents; prokinetic phosphodiesterase-4

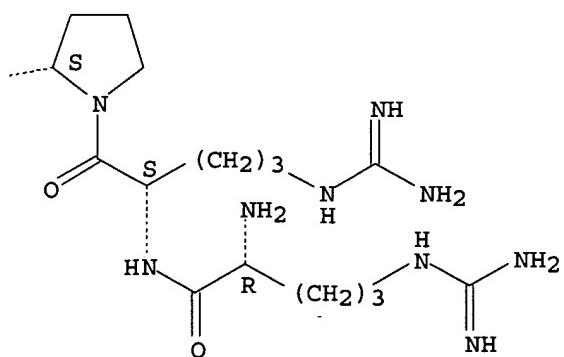
- inhibitor agents for treating gastric hypomotility and related disorders)
- IT 57-27-2, Morphine, biological studies  
 RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)  
 (gastrointestinal disorder from; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)
- IT 7440-09-7, Potassium, biological studies  
 RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)  
 (hypokalemia, pharmaceutical containing phosphodiesterase-4 inhibitor and diuretics causing; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)
- IT 80619-02-9, 5-Lipoxygenase  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (inhibitors, as auxiliary therapeutic agents; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)
- IT 9001-66-5, Monoamine oxidase  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (inhibitors, pharmaceutical containing phosphodiesterase-4 inhibitor and; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)
- IT 9036-21-9, Phosphodiesterase-4  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (inhibitors; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)
- IT 52-53-9, Verapamil 525-66-6, Propranolol 4205-90-7, Clonidine 7439-89-6, Iron, biological studies 7439-92-1, Lead, biological studies 7439-93-2, Lithium, biological studies 7727-43-7, Barium sulfate 9003-53-6D, Polystyrene, resins 83150-76-9, Octreotide  
 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (pharmaceutical containing phosphodiesterase-4 inhibitor and; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)
- IT 52-53-9, Verapamil 525-66-6, Propranolol 4205-90-7, Clonidine 7439-89-6, Iron, biological studies 7439-92-1, Lead, biological studies 7439-93-2, Lithium, biological studies 7727-43-7, Barium sulfate 9003-53-6D, Polystyrene, resins 83150-76-9, Octreotide  
 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (pharmaceutical containing phosphodiesterase-4 inhibitor and; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)
- IT 603969-58-0  
 RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (as auxiliary therapeutic agent; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related disorders)
- RN 603969-58-0 HCAPLUS
- CN L-Arginine, D-arginyl-L-arginyll-L-prolyl-(4R)-4-hydroxy-L-prolylglycyl-3-(2-thienyl)-L-alanyl-L-seryl-(3S)-1,2,3,4-tetrahydro-3-isoquinolinecarbonyl-(2S,3aS,7aS)-octahydro-1H-indole-2-carbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L29 ANSWER 4 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2000:894111 HCAPLUS  
 DN 134:163320  
 ED Entered STN: 21 Dec 2000  
 TI Ala scan analogues of HOE 140. Synthesis and biological activities  
 AU Quartara, Laura; Ricci, Renzo; Meini, Stefania; Patacchini, Riccardo;  
 Giolitti, Alessandro; Amadesi, Silvia; Rizzi, Caterina; Rizzi, Anna;  
 Varani, Katia; Borea, Pier A.; Maggi, Carlo A.; Regoli, Domenico  
 CS Chemistry and Pharmacology Departments, Menarini Ricerche, Florence,

I-50131, Italy  
 SO European Journal of Medicinal Chemistry (2000), 35(11),  
 1001-1010  
 CODEN: EJMCA5; ISSN: 0223-5234  
 PB Editions Scientifiques et Medicales Elsevier  
 DT Journal  
 LA English  
 CC 34-3 (Amino Acids, Peptides, and Proteins)  
 Section cross-reference(s): 7  
 OS CASREACT 134:163320  
 AB The role of the amino acids contained in the sequence of HOE 140 (H-DArg1-Arg2-Pro3-Hyp4-Gly5-Thi6-Ser7-DTic8-Oic9-Arg10-OH), a potent and selective bradykinin B2 receptor peptide antagonist, has been investigated by the replacement of each original residue (one by one) with Ala. The resulting set of decapeptides has been tested for the B2 antagonist activity as well as for competition with the binding of [<sup>3</sup>H]BK to plasma membranes of the human umbilical vein (hUV). Pos. correlations have been established between data obtained with the bioassay and with the binding in the hUV (same species, same tissue) and also between the two bioassays, the guinea-pig ileum (GPI) and the hUV (different species, different tissue). The structure-activity study has shown that the replacement of any of the residues that constitute HOE 140 with Ala is accompanied by a decrease of potency of at least 1 log unit. The analogs can be divided into three groups, with Ala1 and Ala7 showing affinities lower than HOE 140 by a factor of 10, Ala4 and Ala10 by a factor of 100 and Ala2, Ala5, Ala6, Ala8 and Ala9 by a factor higher than 100 (100-1000). To verify the effect of chirality, the DAla5 and DSer7 analogs were synthesized and it was found that the substitution with a D-residue in position 5 is not tolerated while that in position 7 is favorable. The DSer7 derivative is the most potent analog found in this study: it shows potency as high as that of HOE 140 in the bioassays.  
 ST HOE 140 analog prepn bradykinin B2 receptor antagonist MSBAR  
 IT Enzyme kinetics  
     (of inhibition; preparation of HOE 140 analogs and evaluation of their biol. activities)  
 IT Peptides, preparation  
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
     (preparation of HOE 140 analogs and evaluation of their biol. activities)  
 IT Structure-activity relationship  
     (preparation of HOE 140 analogs and evaluation of their biol.. activities with bradykinin B2 receptor)  
 IT Receptors  
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
     (preparation of HOE 140 analogs and evaluation of their biol. activities with bradykinin B2 receptor)  
 IT 185145-93-1P 185145-94-2P 193618-64-3P 324760-25-0P  
 324760-26-1P 324760-27-2P 324760-28-3P 324760-29-4P 324760-30-7P  
 324760-31-8P 324760-32-9P 324760-33-0P  
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
     (preparation of HOE 140 analogs and evaluation of their biol. activities)  
 IT 185145-93-1P 185145-94-2P 193618-64-3P 324760-25-0P  
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 324760-31-8P 324760-32-9P 324760-33-0P  
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological

study); PREP (Preparation)

(preparation of HOE 140 analogs and evaluation of their biol. activities)

RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD

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IT 185145-94-2P 193618-64-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

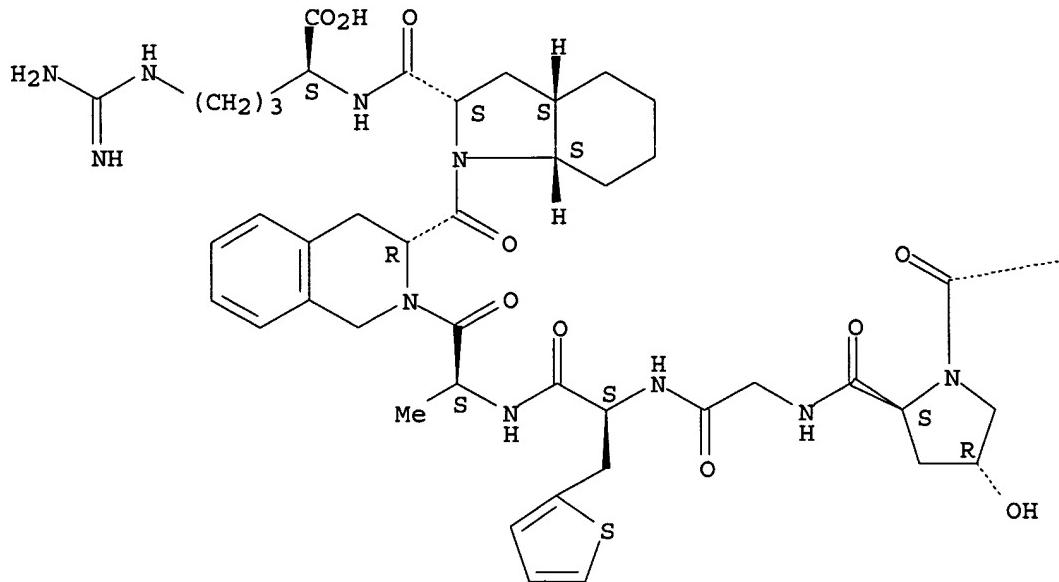
(preparation of HOE 140 analogs and evaluation of their biol. activities)

RN 185145-94-2 HCPLUS

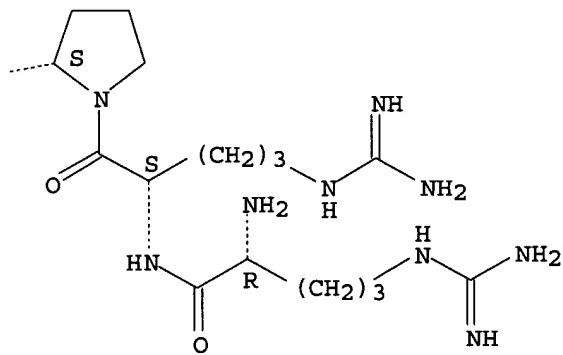
CN L-Arginine, D-arginyl-L-arginylnyl-L-prolyl-(4R)-4-hydroxy-L-prolylglycyl-3-(2-thienyl)-L-alanyl-L-alanyl-(3R)-1,2,3,4-tetrahydro-3-isoquinolinecarbonyl-(2S,3aS,7aS)-octahydro-1H-indole-2-carbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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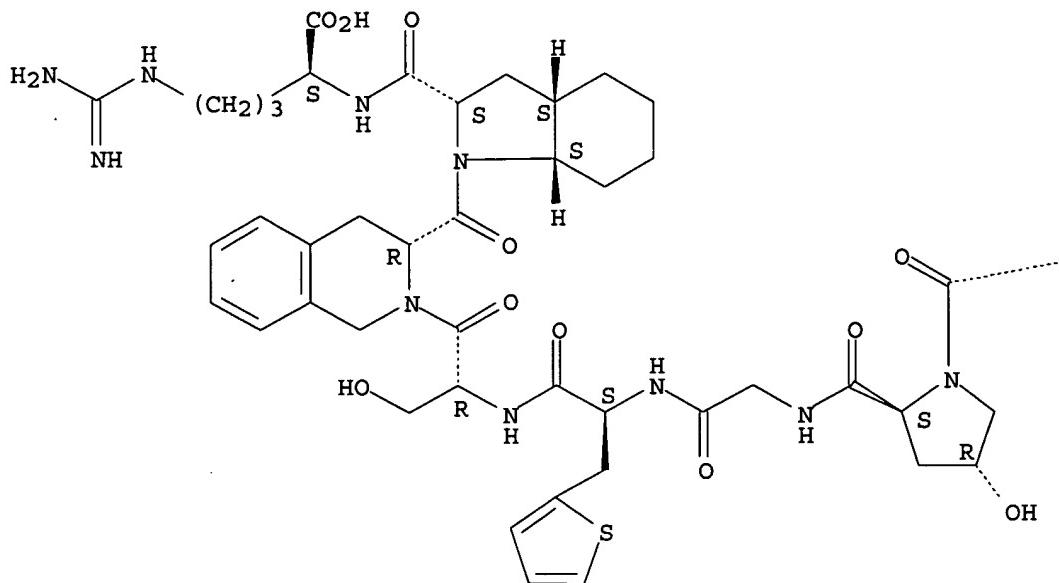


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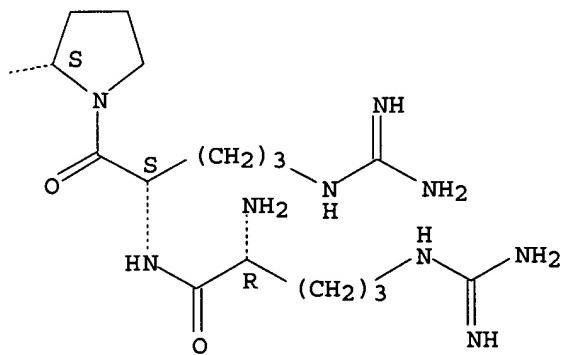
CN L-Arginine, D-arginyl-L-arginyl-L-prolyl-(4R)-4-hydroxy-L-prolylglycyl-3-(2-thienyl)-L-alanyl-D-seryl-(3R)-1,2,3,4-tetrahydro-3-isoquinolinecarbonyl-(2S,3aS,7aS)-octahydro-1H-indole-2-carbonyl- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

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L29 ANSWER 5 OF 21 HCPLUS COPYRIGHT 2005 ACS on STN  
 AN 1998:248459 HCPLUS  
 DN 128:290242  
 ED Entered STN: 01 May 1998  
 TI Use of bradykinin antagonists in medications for treatment and prevention  
 of Alzheimer's disease  
 IN Heitsch, Holger; Henke, Stephan; Breipohl, Gerhard; Knolle, Jochen; Wirth,  
 Klaus; Wiemer, Gabriele

PA Hoechst A.-G., Germany

SO Ger. Offen., 8 pp.

CODEN: GWXXBX

DT Patent

LA German

IC ICM A61K038-08

CC 1-11 (Pharmacology)

Section cross-reference(s) : 2

FAN.CNT 1

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PI	DE 19642289	A1	19980416	DE 1996-19642289	19961014 <--
	EP 836853	A1	19980422	EP 1997-117540	19971010 <--
	EP 836853	B1	20030108		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI				
	AT 230608	E	20030115	AT 1997-117540	19971010 <--
	ES 2190499	T3	20030801	ES 1997-117540	19971010 <--
	JP 10130163	A2	19980519	JP 1997-278301	19971013 <--
	US 6245736	B1	20010612	US 1997-949496	19971014 <--
PRAI	DE 1996-19642289	A	19961014	<--	

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	DE 19642289	ICM	A61K038-08
	EP 836853	ECLA	A61K038/04E; C07K007/18
	US 6245736	NCL	514/002.000; 514/015.000; 530/314.000
		ECLA	A61K038/04E; C07K007/18

OS MARPAT 128:290242

AB Peptides with known activity as bradykinin antagonists are useful for preventing the initiation and inhibiting the progression of Alzheimer's disease and treating its symptoms. Thus, bradykinin receptor antagonists (Markush formula given) at 10-1000 nM inhibited the  $\beta$ /A4-amyloid-induced stimulation of cGMP production by bovine aortic and coronary endothelial cell cultures.

ST Alzheimer disease treatment bradykinin antagonist; peptide Alzheimer disease treatment

IT Anti-Alzheimer's agents

(use of bradykinin antagonists for treatment and prevention of Alzheimer's disease)

IT 58-82-2, Bradykinin

RL: BSU (Biological study, unclassified); BIOL (Biological study) (antagonists; use of bradykinin antagonists for treatment and prevention of Alzheimer's disease)

IT 130308-49-5 130334-55-3 138614-30-9, HOE 140

147267-10-5, NPC 17731 150999-66-9 154131-85-8 154131-87-0

154131-88-1 154131-96-1 154132-00-0 154132-01-1 154172-56-2

156881-50-4 206054-56-0 206054-57-1 206054-58-2 206054-59-3

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(use of bradykinin antagonists for treatment and prevention of Alzheimer's disease)

IT 130308-49-5 130334-55-3

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

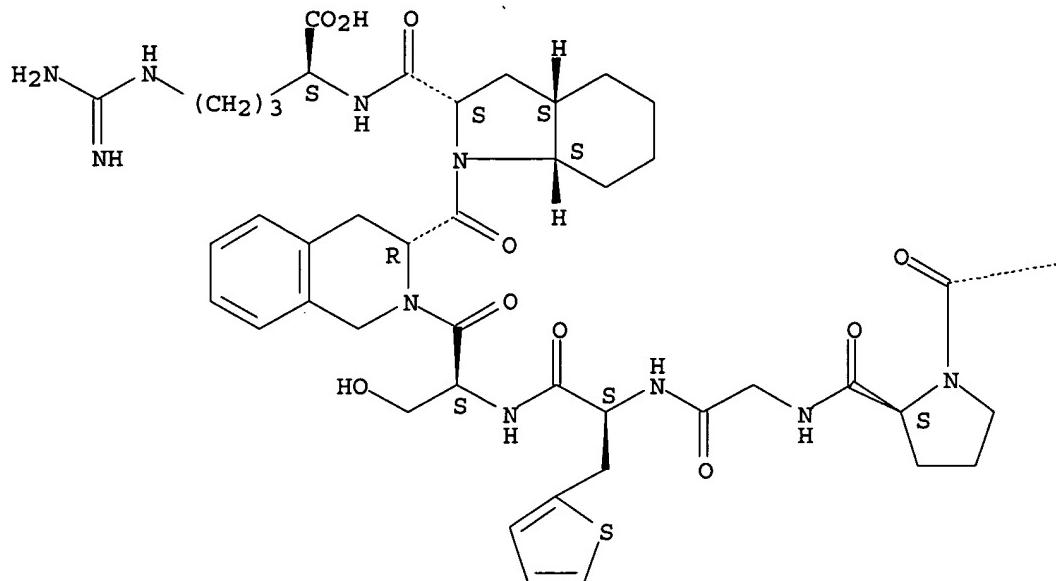
(use of bradykinin antagonists for treatment and prevention of Alzheimer's disease)

RN 130308-49-5 HCAPLUS

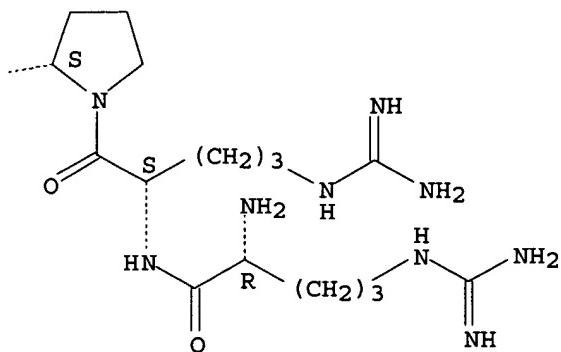
CN L-Arginine, D-arginyl-L-arginyl-L-prolyl-L-prolylglycyl-3-(2-thienyl)-L-alanyl-L-seryl-(3R)-1,2,3,4-tetrahydro-3-isoquinolinecarbonyl-(2S,3aS,7aS)-octahydro-1H-indole-2-carbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



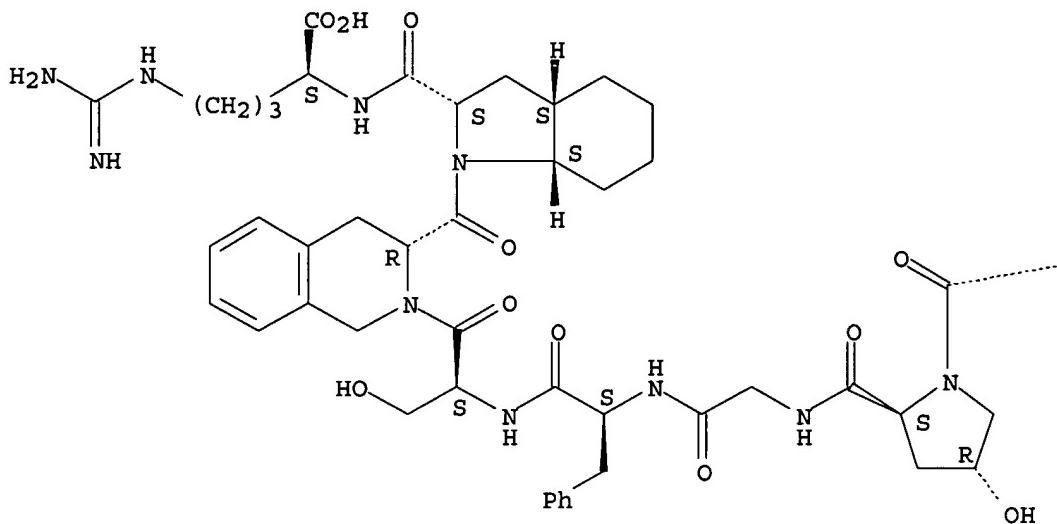
RN 130334-55-3 HCPLUS

CN Bradykinin, N<sub>2</sub>-D-arginyl-3-(trans-4-hydroxy-L-proline)-7-(D-1,2,3,4-tetrahydro-3-isoquinolinecarboxylic acid)-8-[L-(2 $\alpha$ ,3 $\alpha$  $\beta$ ,7 $\alpha$  $\beta$ )-octahydro-1H-indole-2-carboxylic acid]- (9CI)

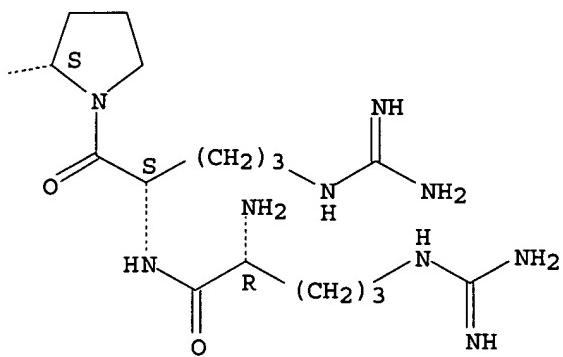
(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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L29 ANSWER 6 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1997:655400 HCAPLUS  
 DN 127:314823  
 ED Entered STN: 15 Oct 1997  
 TI Use of bradykinin antagonists for treatment of chronic fibrogenic liver diseases  
 IN Breipohl, Gerhard; Henke, Stephan; Knolle, Jochen; Wirth, Klausm; Hropot,

Max; Bickel, Martin  
 PA Hoechst A.-G., Germany; Aventis Pharma Deutschland GmbH  
 SO Eur. Pat. Appl., 12 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA German  
 IC ICM A61K038-08  
 CC 1-9 (Pharmacology)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 797997	A2	19971001	EP 1997-104345	19970314 <--
	EP 797997	A3	20000531		
	EP 797997	B1	20050615		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, FI				
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	US 5863901	A	19990126	US 1997-810012	19970304 <--
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## CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	EP 797997	ICM	A61K038-08
	EP 797997	ECLA	A61K038/04E
	DE 19612067	ECLA	A61K038/04E
	US 5863901	NCL	514/015.000; 514/016.000; 514/893.000; 530/314.000; 530/327.000; 530/328.000
		ECLA	A61K038/04E
	AT 297749	ECLA	A61K038/04E

OS MARPAT 127:314823

AB Peptide and peptidomimetic bradykinin antagonists are useful for treatment of hepatic cirrhosis and fibrosis as well as acute liver disorders. They are also useful for prevention and treatment of complications of these diseases, e.g. portal hypertension, ascites, edema, hepatorenal syndrome, hypertensive gastropathy and colonopathy, splenomegaly, and circulatory complications. Thus, administration of HOE 140 (0.3 mg/kg s.c., twice over 6 h) to rats with CCl<sub>4</sub>-induced hepatic fibrosis reversed the Na<sup>+</sup> retention associated with peripheral vasodilatation, edema, and ascites.

ST liver fibrosis cirrhosis bradykinin antagonist

IT Liver, disease

(fibrosis; use of bradykinin antagonists for treatment of chronic fibrogenic liver diseases)

IT Cirrhosis

Diuresis

Liver, disease

(use of bradykinin antagonists for treatment of chronic fibrogenic liver diseases)

IT Peptides, biological studies

Peptidomimetics

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(use of bradykinin antagonists for treatment of chronic fibrogenic liver diseases)

IT 58-82-2, Bradykinin

RL: BSU (Biological study, unclassified); BIOL (Biological study) (antagonists; use of bradykinin antagonists for treatment of chronic fibrogenic liver diseases)

IT 7440-23-5, Sodium, biological studies

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (secretion of, by kidney; use of bradykinin antagonists for treatment of chronic fibrogenic liver diseases)

IT 130308-49-5 130308-60-0 130334-55-3 138614-30-9, HOE  
140 140695-51-8 147267-10-5 154131-85-8 154131-88-1 154131-96-1  
154132-00-0 154132-01-1 154172-56-2 156881-50-4 197370-27-7  
197370-28-8 197370-29-9 197795-47-4

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(use of bradykinin antagonists for treatment of chronic fibrogenic liver diseases)

IT 130308-49-5 130334-55-3

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

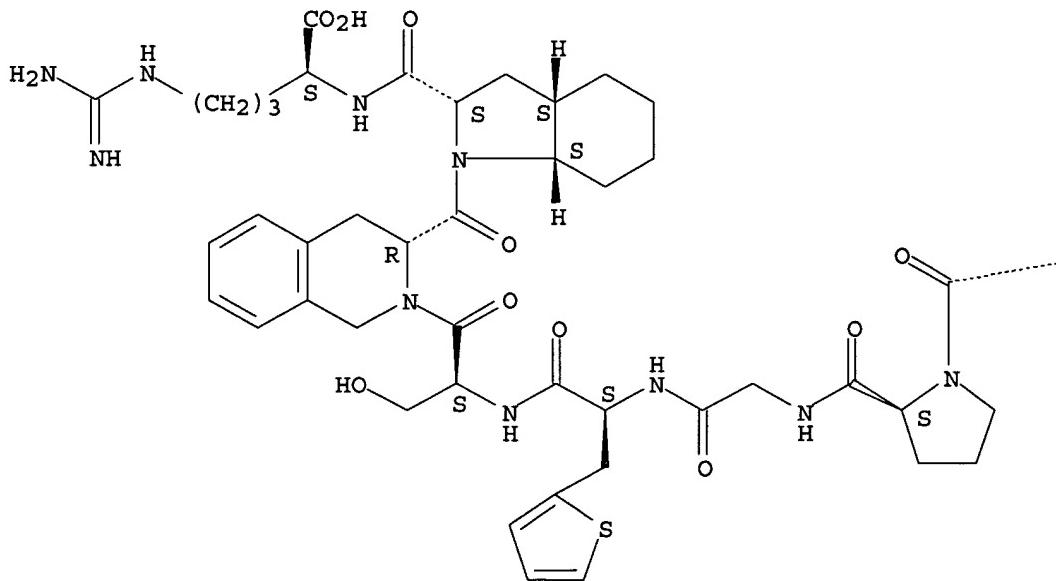
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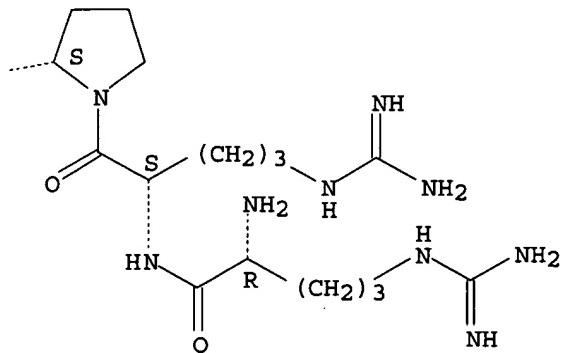
CN L-Arginine, D-arginyl-L-arginyll-L-prolyl-L-prolylglycyl-3-(2-thienyl)-L-alanyl-L-seryl-(3R)-1,2,3,4-tetrahydro-3-isooquinolinecarbonyl-(2S,3aS,7aS)-octahydro-1H-indole-2-carbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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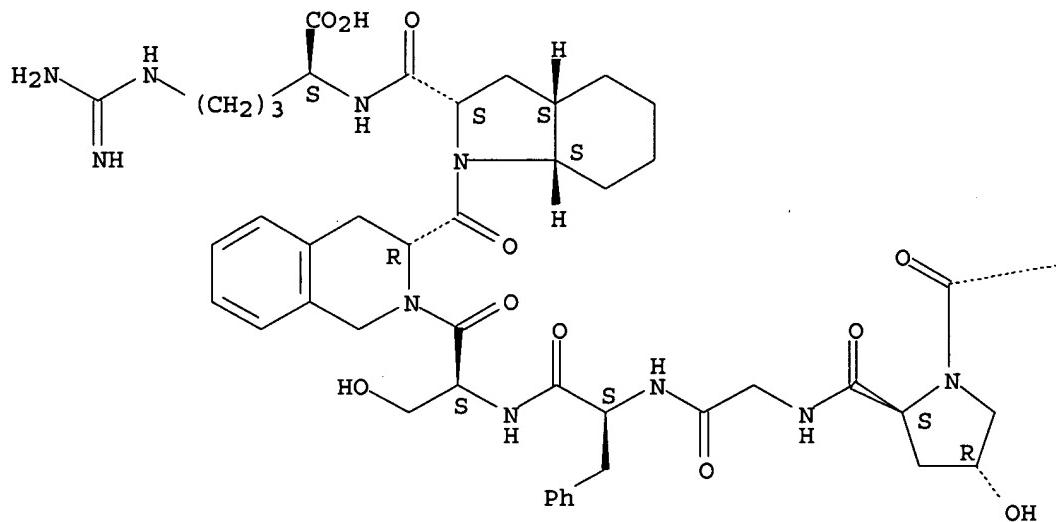


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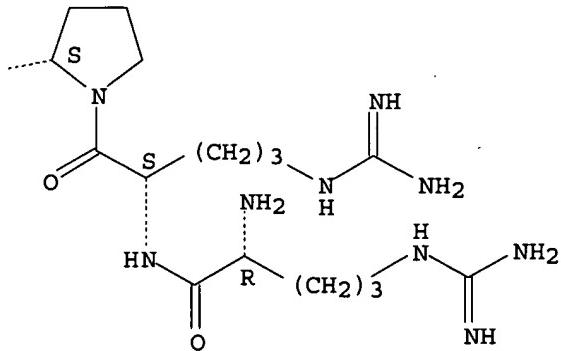
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(CA INDEX NAME)

Absolute stereochemistry.

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L29 ANSWER 7 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1997:475133 HCAPLUS  
 DN 127:162123  
 ED Entered STN: 30 Jul 1997  
 TI Peptides having bradykinin antagonist action  
 IN Henke, Stephan; Anagnostopoulos, Hiristo; Breipohl, Gerhard; Knolle, Jochen; Stechl, Jens; Scholkens, Bernward; et al.  
 PA Hoechst A.-G., Germany  
 SO U.S., 26 pp., Cont. of U.S. Ser. No. 236,018.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 IC ICM C07K007-18  
 ICS A61K038-17  
 INCL 514002000  
 CC 34-3 (Amino Acids, Peptides, and Proteins)  
 Section cross-reference(s): 1

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	DE 3926822	A1	19910221	DE 1989-3926822	19890814 <--
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## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES		
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US 5648333	NCL	514/002.000; 514/010.000; 514/015.000; 514/803.000;		
	ECLA	530/314.000; 530/328.000		
		C07K007/18 <--		
OS MARPAT 127:162123				
AB Peptides A-B-C-E-F-K-P-G-M-F [A = H, alkyl, alkanoyl, cycloalkyl, aryl, etc.; B = basic amino acid which may be substituted in side chain; C = G'-G'-Gly or G'-NH(CH <sub>2</sub> ) <sub>n</sub> CO, where G' = heterocyclcarbonyl and n = 2-8; E = aromatic amino acid radical; F, M = bond or amino acid which may be substituted in side chain; K = bond or NH(CH <sub>2</sub> ) <sub>x</sub> CO, where x = 1-4; P = D-Tic (Tic = 1,2,3,4-tetrahydroisoquinolin-3-ylcarbonyl); G = bond or G'] were prepared as bradykinin antagonists. Thus, H-D-Arg-Arg-Hyp-Pro-Gly-Phe-Ser-D-Tic-Phe-Arg-OH was prepared by the solid phase method and assayed for bradykinin antagonist activity (IC <sub>50</sub> = 4.6 x 10 <sup>-6</sup> M).				
ST peptide prepn bradykinin antagonist				
IT Peptides, preparation				
	RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (peptides having bradykinin antagonist action)			
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IT 58-82-2, Bradykinin				
	RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (peptides having bradykinin antagonist action)			
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RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (peptides having bradykinin antagonist action)

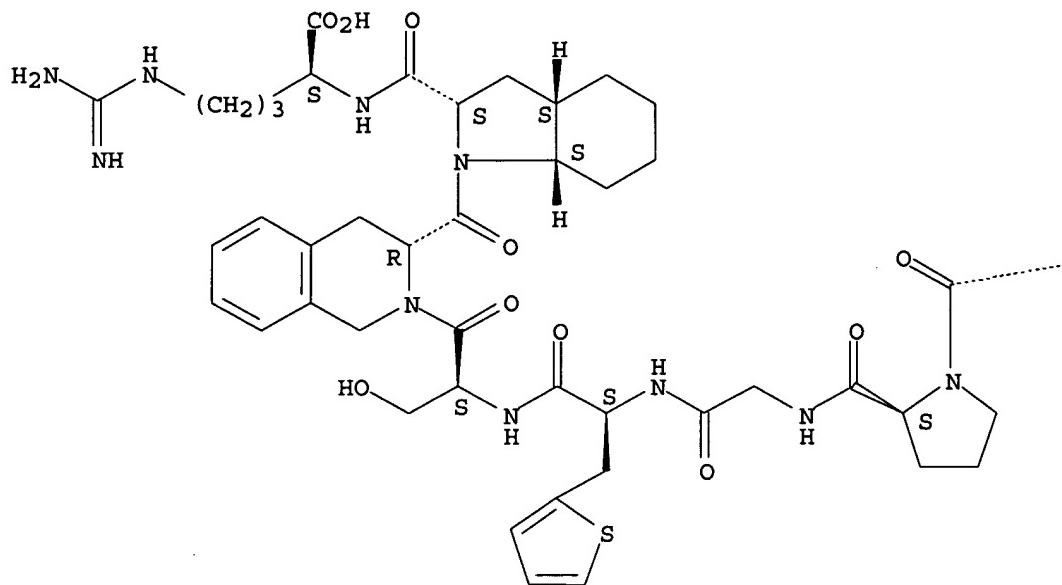
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RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (peptides having bradykinin antagonist action)

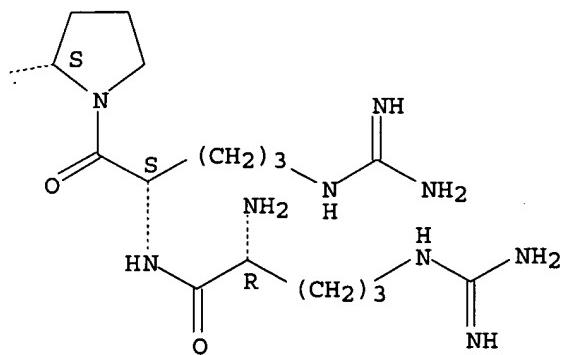
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Absolute stereochemistry.

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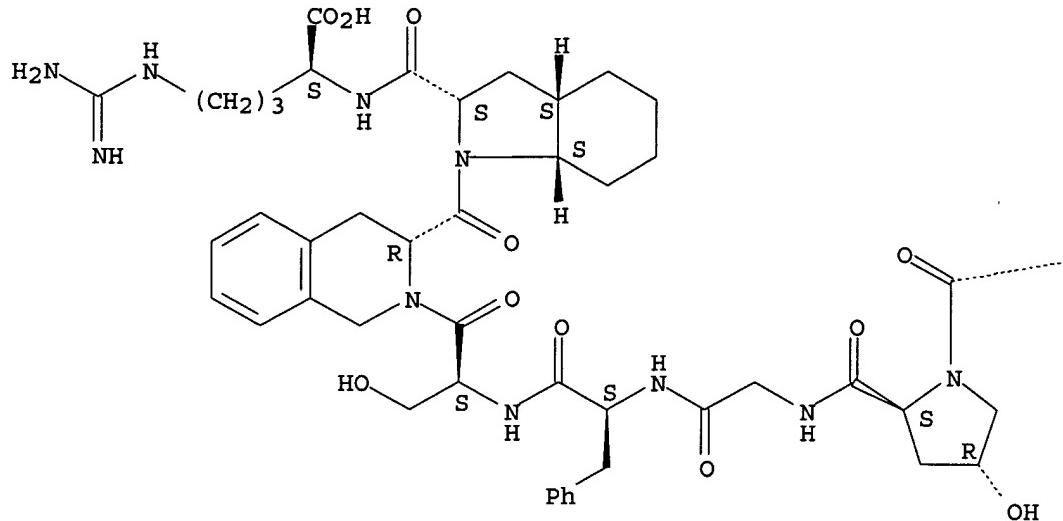


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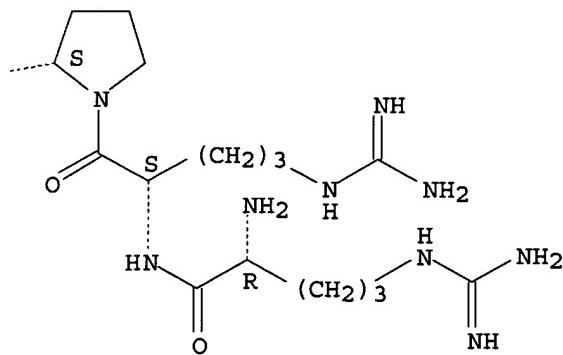
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(CA INDEX NAME)

Absolute stereochemistry.

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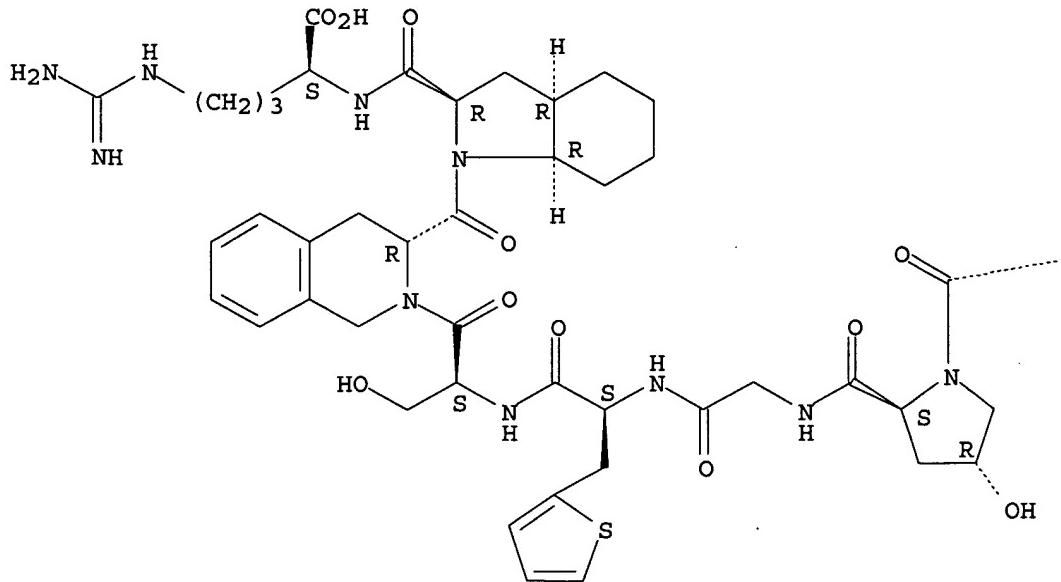


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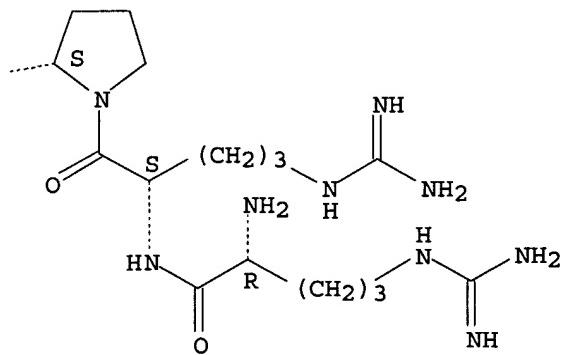
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(CA INDEX NAME)

Absolute stereochemistry.

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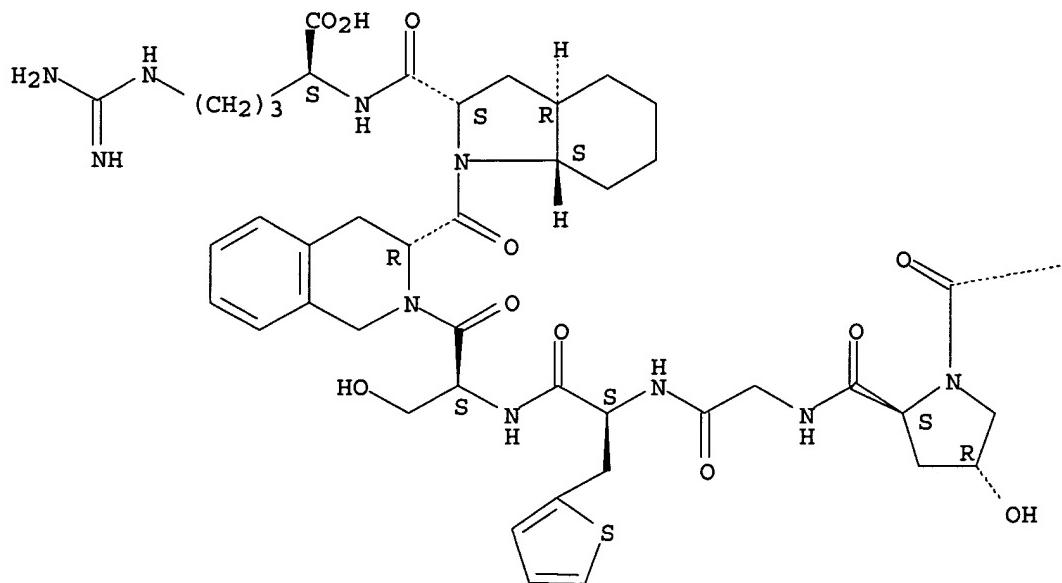


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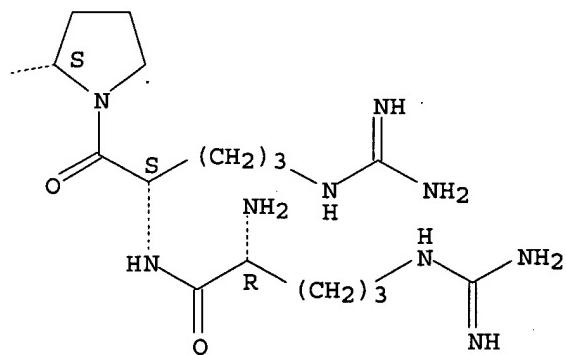
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(CA INDEX NAME)

Absolute stereochemistry.

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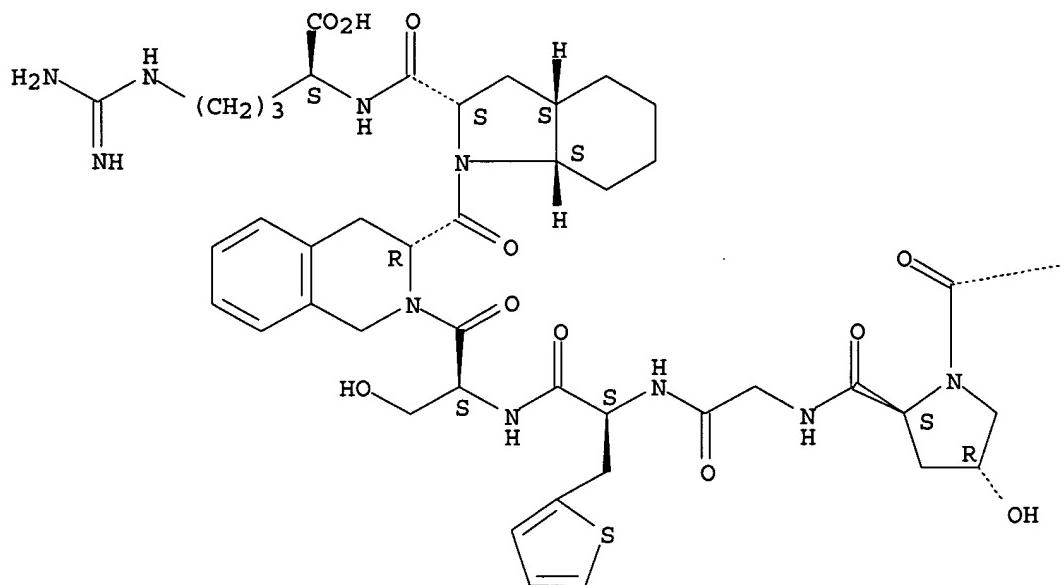


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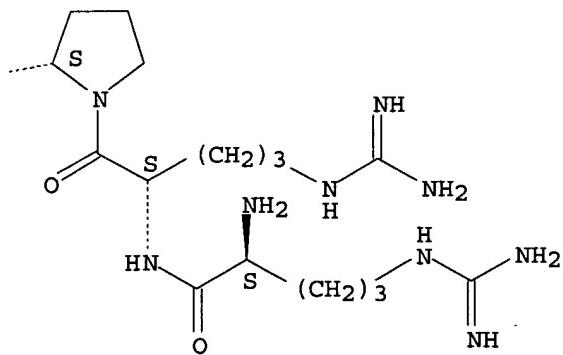
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## Absolute stereochemistry.

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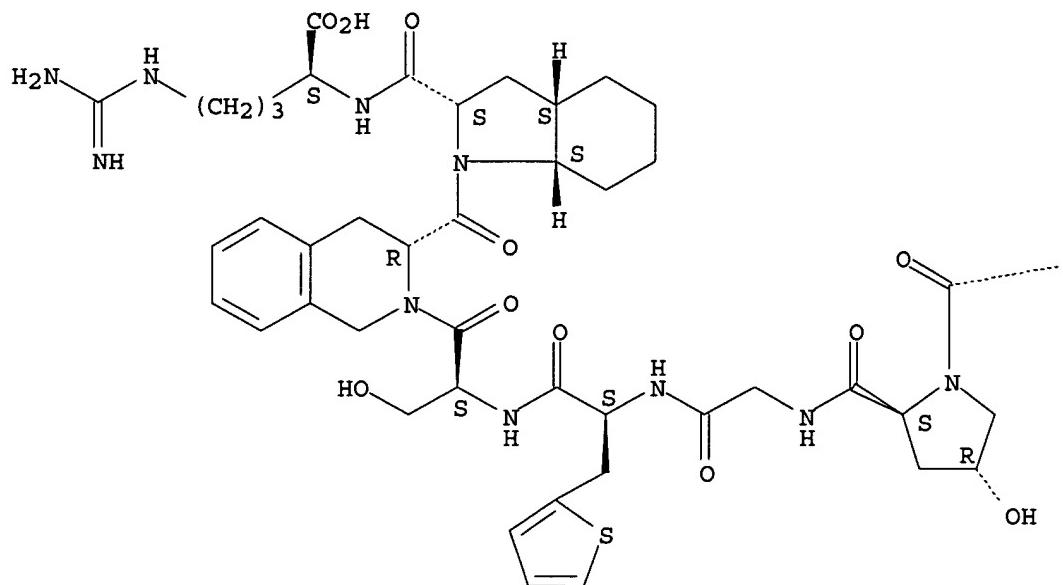


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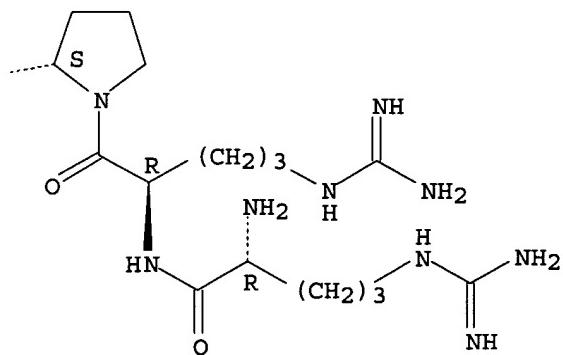
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(CA INDEX NAME)

Absolute stereochemistry.

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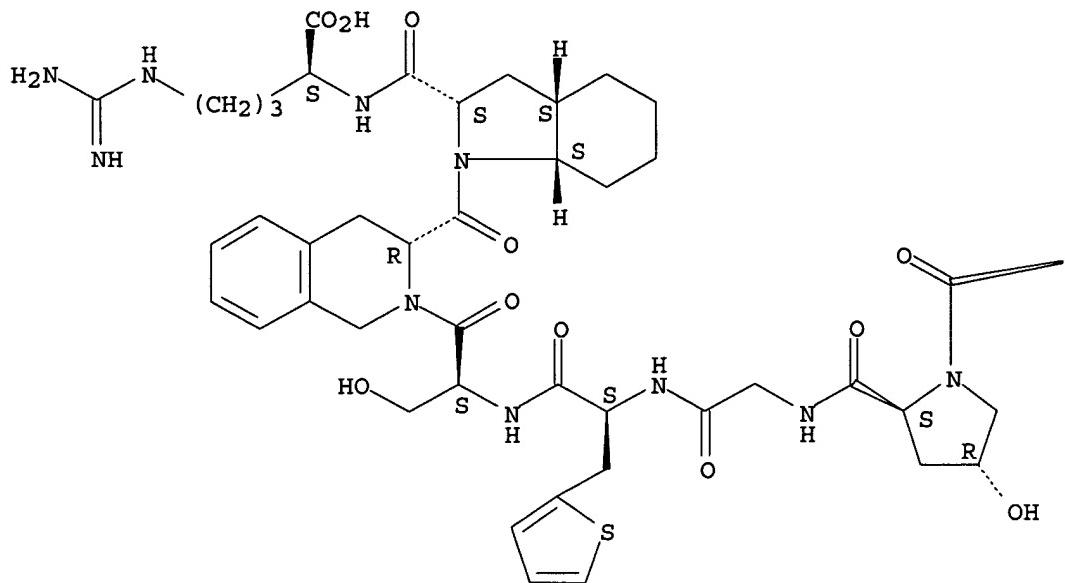


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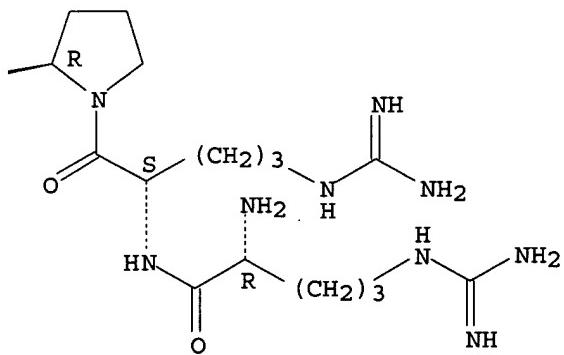
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(CA INDEX NAME)

Absolute stereochemistry.

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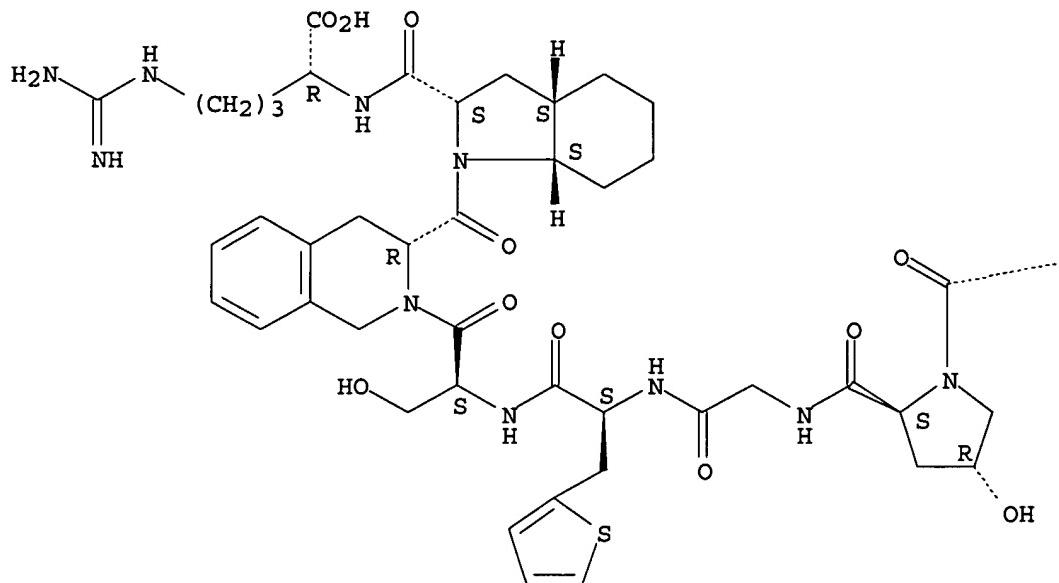
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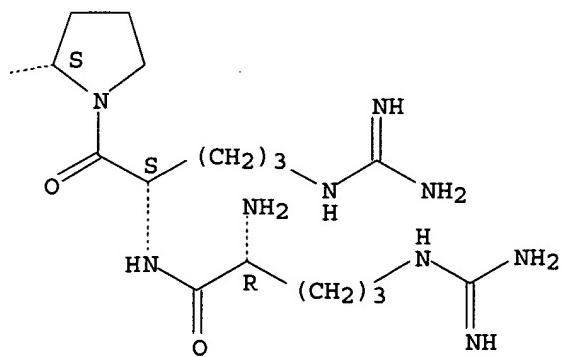
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 (CA INDEX NAME)

Absolute stereochemistry.

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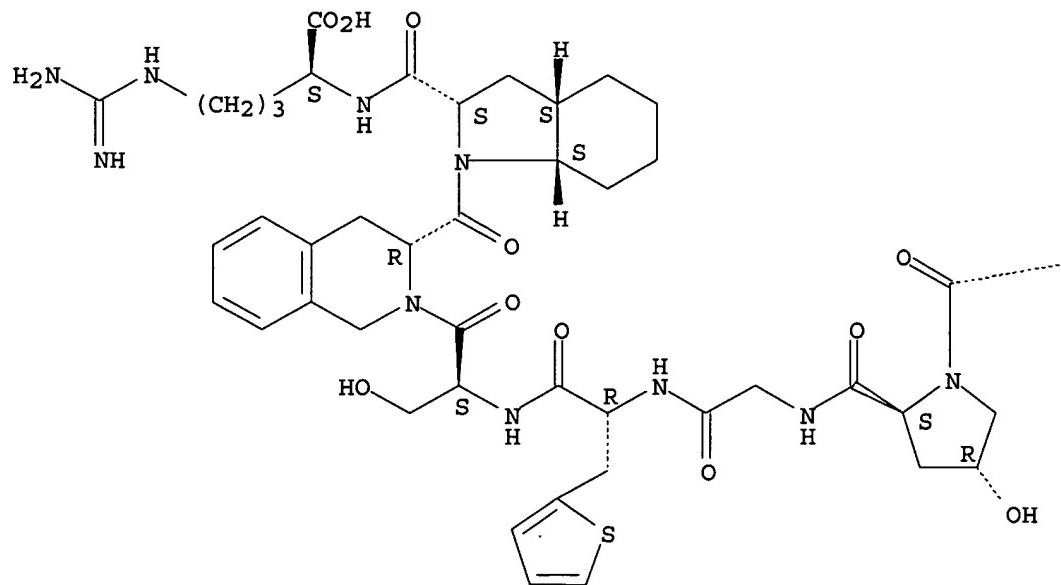
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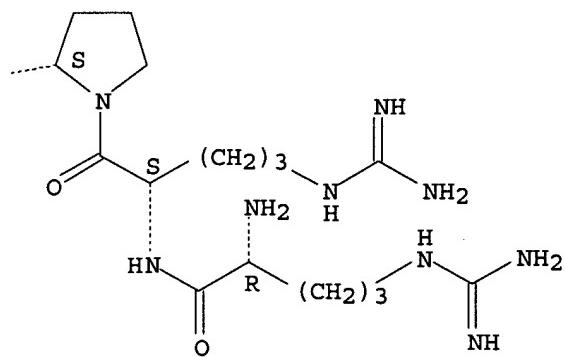
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 (CA INDEX NAME)

Absolute stereochemistry.

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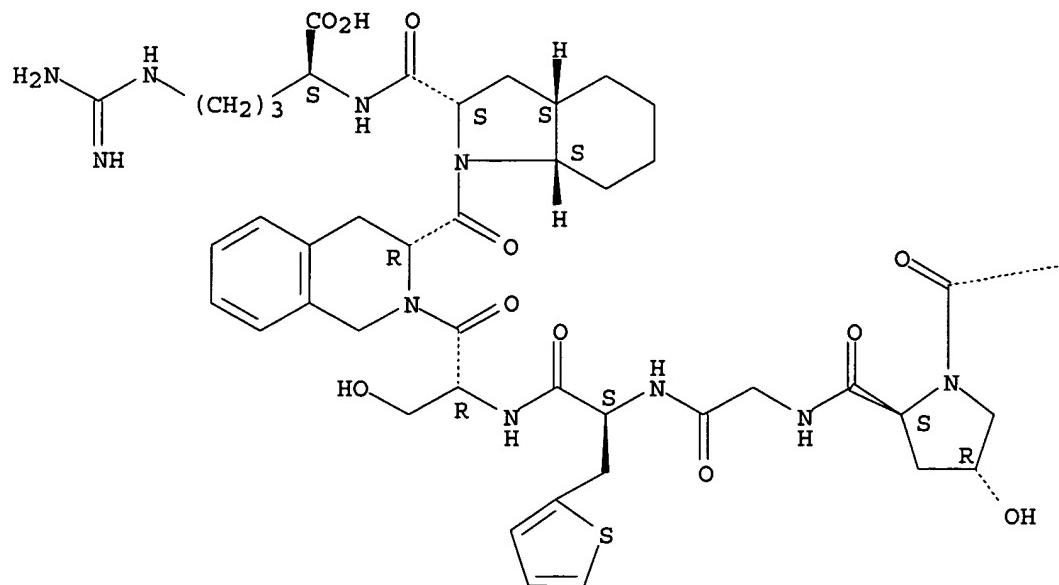


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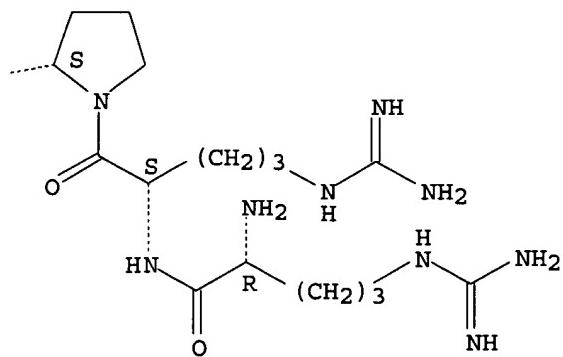
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(CA INDEX NAME)

Absolute stereochemistry.

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PAGE 1-B

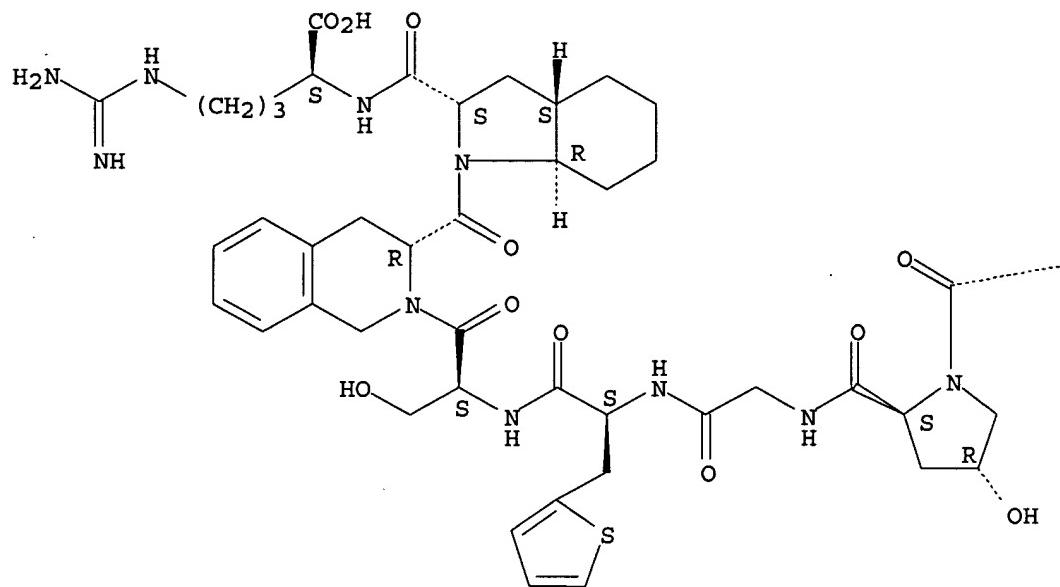


RN 193618-68-7 HCPLUS

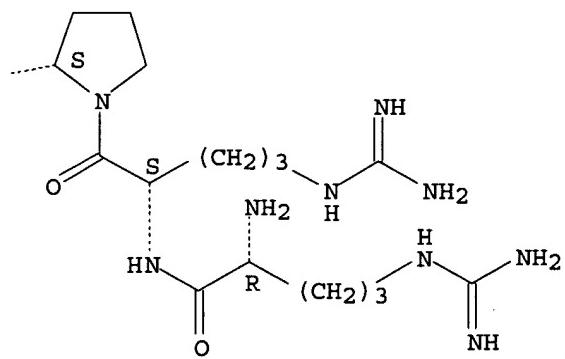
CN L-Arginine, D-arginyl-L-arginyl-L-prolyl-(4R)-4-hydroxy-L-prolylglycyl-3-(2-thienyl)-L-alanyl-L-seryl-(3R)-1,2,3,4-tetrahydro-3-isoquinolinecarbonyl-(2S,3aS,7aR)-octahydro-1H-indole-2-carbonyl- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



IT 130308-52-0P 130308-53-1P

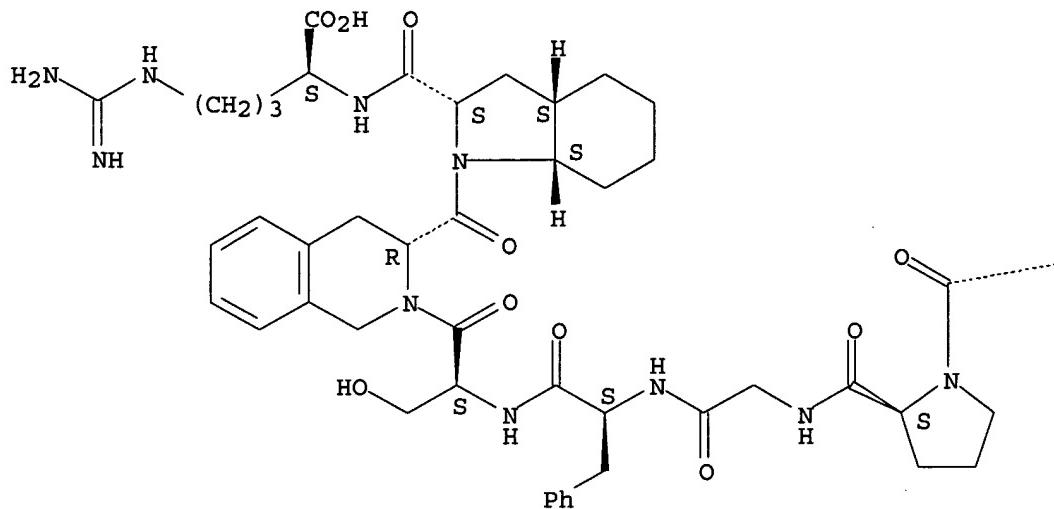
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(peptides having bradykinin antagonist action)

RN 130308-52-0 HCPLUS

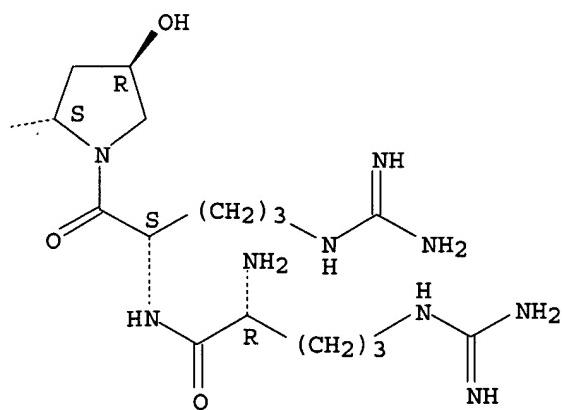
CN Bradykinin, N<sub>2</sub>-D-arginyl-2-(trans-4-hydroxy-L-proline)-7-(D-1,2,3,4-tetrahydro-3-isoquinolinecarboxylic acid)-8-[(2 $\alpha$ ,3 $\alpha$  $\beta$ ,7 $\alpha$  $\beta$ )-L-octahydro-1H-indole-2-carboxylic acid]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

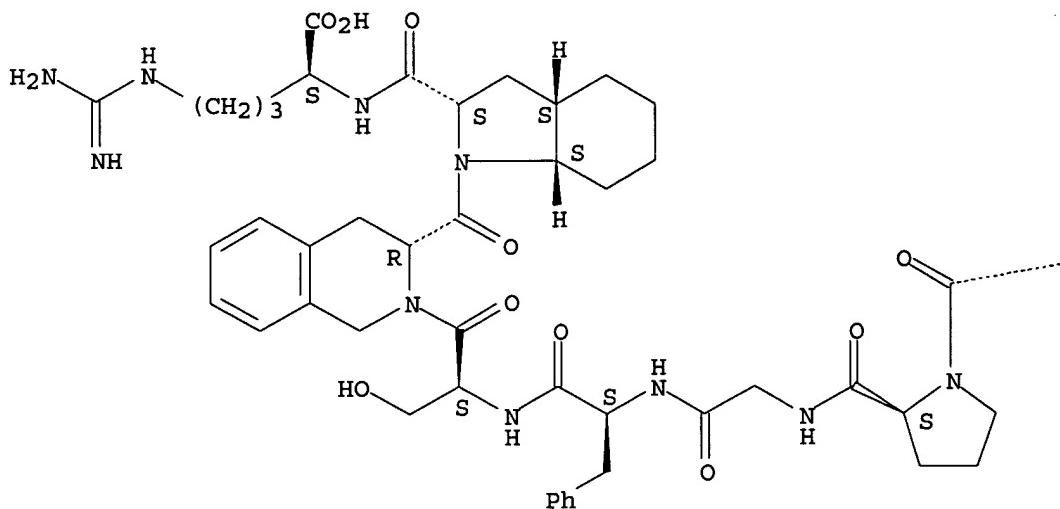


RN 130308-53-1 HCAPLUS

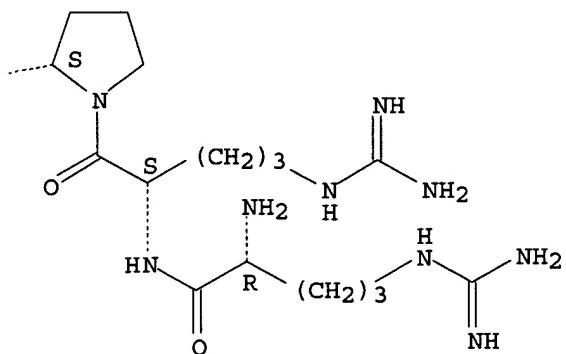
CN Bradykinin, N2-D-arginyl-7-(D-1,2,3,4-tetrahydro-3-isoquinolinecarboxylic acid)-8-[(2α,3αβ,7αβ)-L-octahydro-1H-indole-2-carboxylic acid]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L29 ANSWER 8 OF 21 HCPLUS COPYRIGHT 2005 ACS on STN  
 AN 1996:681794 HCPLUS  
 DN 126:54996  
 ED Entered STN: 20 Nov 1996  
 TI Mutations in the B2 bradykinin receptor reveal a different pattern of contacts for peptidic agonists and peptidic antagonists  
 AU Jarnagin, Kurt; Bhakta, Sunil; Zuppan, Patty; Yee, Calvin; Ho, Teresa;  
 Phan, Thu; Tahilramani, Ram; Pease, Joe H. B.; Miller, Aaron; Freedman,  
 Richard  
 CS Molecular Pharmacology, Roche Bioscience, Palo Alto, CA, 94304, USA  
 SO Journal of Biological Chemistry (1996), 271(45), 28277-28286

CODEN: JBCHA3; ISSN: 0021-9258

PB American Society for Biochemistry and Molecular Biology

DT Journal

LA English

CC 2-2 (Mammalian Hormones)

AB The B2 bradykinin receptor, a seven-helix transmembrane receptor, binds the inflammatory mediator bradykinin (BK) and the structurally related peptide antagonist HOE-140. The binding of HOE-140 and the binding of bradykinin are mutually exclusive and competitive. Fifty-four site-specific receptor mutations were made. BK's affinity is reduced 2200-fold by F261A, 490-fold by T265A, 60-fold by D286A, and 3-10-fold by N200A, D268A, and Q290A. In contrast, HOE-140 affinity is reduced less than 7-fold by F254A, F261A, Y297A, and Q262A. The almost complete discordance of mutations that affect BK binding vs. HOE-140 binding is surprising, but it was paralleled by the effect of single changes in BK and HOE-140. [Ala9]BK and [Ala6]BK are reduced in receptor binding affinity 27,000- and 150-fold, resp., while [Ala9]HOE-140 affinity is reduced 7-fold and [Ala6]HOE-140 affinity is unchanged. NMR spectroscopy of all of the peptidic analogs of BK or HOE-140 revealed a  $\beta$ -turn at the C terminus. Models of the receptor-ligand complex suggested that bradykinin is bound partially inside the helical bundle of the receptor with the amino terminus emerging from the extracellular side of helical bundle. In these models a salt bridge occurs between Arg9 and Asp286; the models also place Phe8 in a hydrophobic pocket midway through the transmembrane region. Models of HOE-140 binding to the receptor place its  $\beta$ -turn one  $\alpha$ -helical turn deeper and closer to helix 7 and helix 1 as compared with bradykinin-receptor complex models.

ST bradykinin B2 receptor structure activity; HOE 140 bradykinin B2 receptor structure

IT Bradykinin receptors

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)

(B2; bradykinin B2 receptor structure-activity studies reveal different pattern of contacts for peptidic agonists and peptidic antagonists)

IT Structure-activity relationship

(ligand-binding; bradykinin B2 receptor structure-activity studies reveal different pattern of contacts for peptidic agonists and peptidic antagonists)

IT Conformation

Helix (conformation)  
(protein; bradykinin B2 receptor structure-activity studies reveal different pattern of contacts for peptidic agonists and peptidic antagonists)

IT Structure-activity relationship

(receptor-binding; bradykinin B2 receptor structure-activity studies reveal different pattern of contacts for peptidic agonists and peptidic antagonists)

IT 58-82-2, Bradykinin 3322-88-1, [Ala6]-bradykinin 3322-91-6

138614-30-9, HOE-140 185145-93-1 185145-94-2

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)

(bradykinin B2 receptor structure-activity studies reveal different pattern of contacts for peptidic agonists and peptidic antagonists)

L29 ANSWER 9 OF 21 HCPLUS COPYRIGHT 2005 ACS on STN

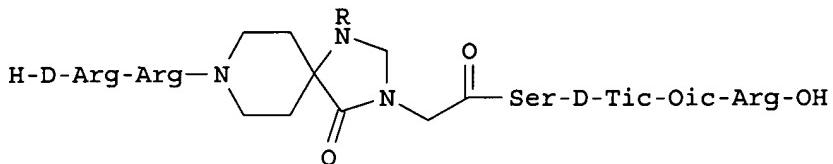
AN 1996:422410 HCPLUS

DN 125:168616

ED Entered STN: 18 Jul 1996

TI Synthesis and Characterization of Pseudopeptide Bradykinin B2 Receptor Antagonists Containing the 1,3,8-Triazaspiro[4.5]decan-4-one Ring System

AU Mavunkel, Babu J.; Lu, Zhijian; Goehring, R. Richard; Lu, Songfeng;  
 Chakravarty, Sarvajit; Perumattam, John; Novotny, Elizabeth A.; Connolly,  
 Maureen; Valentine, Heather; Kyle, Donald J.  
 CS Scios Nova Inc., Sunnyvale, CA, 94086, USA  
 SO Journal of Medicinal Chemistry (1996), 39(16), 3169-3173  
 CODEN: JMCMAR; ISSN: 0022-2623  
 PB American Chemical Society  
 DT Journal  
 LA English  
 CC 34-3 (Amino Acids, Peptides, and Proteins)  
 Section cross-reference(s): 1, 2  
 OS CASREACT 125:168616  
 GI



AB A series of pseudopeptides I ( $R = Ph$ ,  $4-MeC_6H_4$ , cyclohexylmethyl, Pr, cyclohexyl,  $PhCH_2CH_2$ ; Tic = 1,2,3,4-tetrahydroisoquinoline-3-carbonyl; Oic = octahydroindane-2-carbonyl) containing substituted 1,3,8-triazaspiro[4.5]decan-4-one-3-acetic acid residues as amino acid surrogates to replace the Pro<sub>2</sub>-Pro<sub>3</sub>-Gly<sub>4</sub>-Phe<sub>5</sub> section of the peptide bradykinin B2 receptor antagonist [Pro<sub>3</sub>, Phe<sub>5</sub>]HOE 140 (D-Arg<sub>0</sub>-Arg<sub>1</sub>-Pro<sub>2</sub>-Pro<sub>3</sub>-Gly<sub>4</sub>-Phe<sub>5</sub>-Ser<sub>6</sub>-D-Tic<sub>7</sub>-Oic<sub>8</sub>-Arg<sub>9</sub>) were prepared. Pseudopeptides I were examined in vitro for their B2 receptor affinities as well as for their ability to block bradykinin mediated actions in vivo. Two compds. in particular, NPC 18521 (I;  $R = Ph$ ) and NPC 18688 (I;  $R = cyclohexyl$ ) were quite potent in these latter assays, indicating that a significant portion of this prototypical second generation decapeptide antagonist can be replaced with a more compact nonpeptide mol.  
 ST triazaspirodecanone pseudopeptide prepn bradykinin antagonist; NPC 18521 18688 prepn bradykinin antagonist  
 IT Receptors  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (bradykinin B2, antagonists; preparation and characterization of pseudopeptide bradykinin B2 receptor antagonists containing a triazaspirodecanone ring system)  
 IT Peptides, preparation  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (pseudo-, triazaspirodecanone; preparation and characterization of pseudopeptide bradykinin B2 receptor antagonists containing a triazaspirodecanone ring system)  
 IT 130308-53-1DP, analogs 168824-73-5P, NPC 18521 168824-74-6P 168824-75-7P 168824-77-9P 174693-30-2P, NPC 18688 180386-41-8P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (preparation and characterization of pseudopeptide bradykinin B2 receptor antagonists containing a triazaspirodecanone ring system)  
 IT 62-53-3, Aniline, reactions 64-04-0, 2-Phenylethylamine 96-32-2,

Methyl bromoacetate 106-49-0, 4-Methylaniline, reactions 108-91-8,  
 Cyclohexylamine, reactions 3218-02-8, Cyclohexanemethanamine  
 3612-20-2, 1-Benzyl-4-piperidone 13836-37-8D, resin-bound 109523-13-9  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation and characterization of pseudopeptide bradykinin B2 receptor  
 antagonists containing a triazaspirodecanone ring system)

IT 180386-30-5P 180386-31-6P 180386-32-7P 180386-33-8P 180386-34-9P  
 180386-35-0P 180386-36-1P 180386-37-2P 180386-38-3P 180386-39-4P  
 180386-40-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and characterization of pseudopeptide bradykinin B2 receptor  
 antagonists containing a triazaspirodecanone ring system)

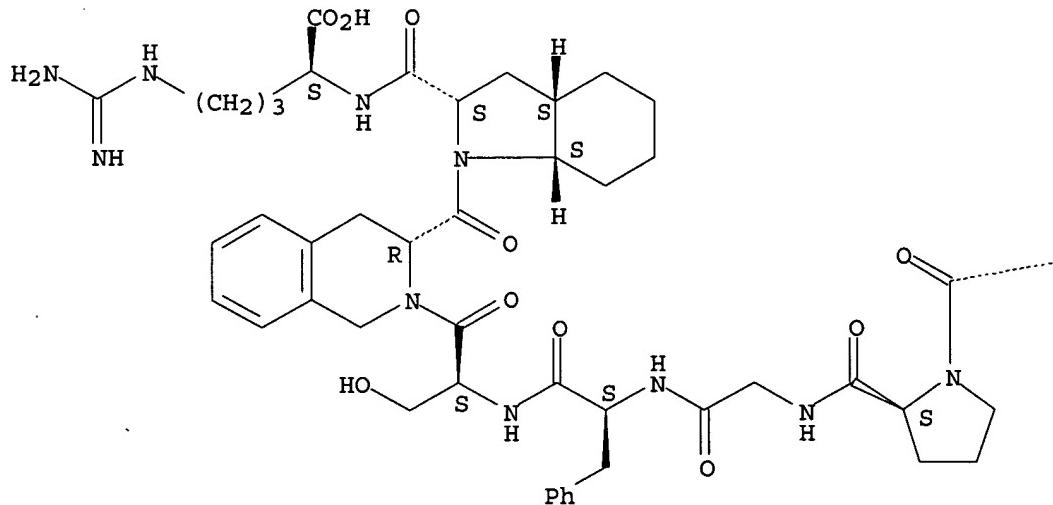
IT 130308-53-1DP, analogs  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
 study, unclassified); SPN (Synthetic preparation); BIOL (Biological  
 study); PREP (Preparation)  
 (preparation and characterization of pseudopeptide bradykinin B2 receptor  
 antagonists containing a triazaspirodecanone ring system)

RN 130308-53-1 HCPLUS

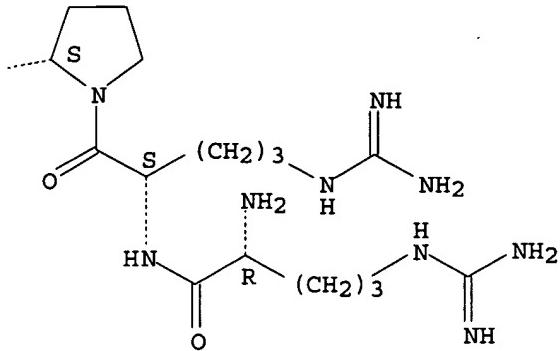
CN Bradykinin, N<sub>2</sub>-D-arginyl-7-[(D-1,2,3,4-tetrahydro-3-isoquinolinecarboxylic  
 acid)-8-[(2 $\alpha$ ,3 $\alpha$ ,7 $\alpha$ )-L-octahydro-1H-indole-2-carboxylic  
 acid]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L29 ANSWER 10 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1994:681159 HCAPLUS  
 DN 121:281159  
 ED Entered STN: 10 Dec 1994  
 TI A systematic study of the SAR in second generation bradykinin antagonists leads to the design of the first high affinity cyclic peptide antagonists  
 AU Chakravarty, S.; Mavunkel, B. J.; Lu, S.; Wilkins, D. E.; Kyle, D. J.  
 CS Scios Nova Inc., Baltimore, MD, 21224, USA  
 SO Pept.: Chem., Struct. Biol., Proc. Am. Pept. Symp., 13th (1994 ), Meeting Date 1993, 381-3. Editor(s): Hodges, Robert S.; Smith, John A. Publisher: ESCOM, Leiden, Neth.  
 CODEN: 60LXAW  
 DT Conference  
 LA English  
 CC 34-3 (Amino Acids, Peptides, and Proteins)  
 Section cross-reference(s): 2  
 AB A report from a symposium on structure-activity profiles of bradykinin antagonist peptide NPC 18545 (H-D-Arg0-Arg1-Pro2-Hyp3-Gly4-Phe5-Ser6-D-Tic7-Oic8-Arg9-OH) (Tic = 1,2,3,4-tetrahydroisoquinoline-3-carboxylic acid, Oic = octahydroindole-2-carboxylic acid) by systematic replacements of residues 1-5 with glycine.  
 ST bradykinin antagonist structure activity symposium; NPC 18545 structure activity symposium  
 IT Molecular structure-biological activity relationship (bradykinin-inhibiting, a systematic study of the structure-activity relationships in second generation bradykinin antagonists leads to the design of the first high affinity cyclic peptide antagonists)  
 IT 58-82-2, Bradykinin  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (antagonists; a systematic study of the structure-activity relationships in second generation bradykinin antagonists leads to the design of the first high affinity cyclic peptide antagonists)  
 IT 58-82-2, Bradykinin  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

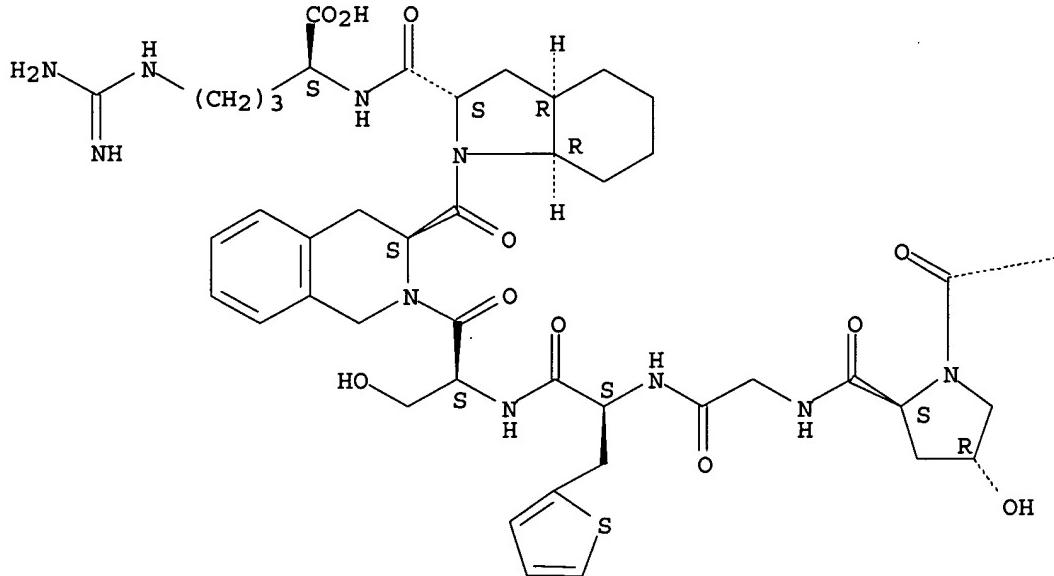
(Biological study); PROC (Process)  
 (antagonists; a systematic study of the structure-activity  
 relationships in second generation bradykinin antagonists leads to the  
 design of the first high affinity cyclic peptide antagonists)

L29 ANSWER 11 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1994:450783 HCAPLUS  
 DN 121:50783  
 ED Entered STN: 06 Aug 1994  
 TI Effects of peptide and nonpeptide antagonists of bradykinin B2 receptors  
 on the venoconstrictor action of bradykinin  
 AU Marceau, Francois; Levesque, Luc; Drapeau, Guy; Rioux, Francis; Salvino,  
 Joseph M.; Wolfe, Henry R.; Seoane, Peter R.; Sawutz, David G.  
 CS Centre Recherche, Hotel-Dieu de Quebec, QC, G1R 2J6, Can.  
 SO Journal of Pharmacology and Experimental Therapeutics (1994),  
 269(3), 1136-43  
 CODEN: JPETAB; ISSN: 0022-3565  
 DT Journal  
 LA English  
 CC 2-10 (Mammalian Hormones)  
 Section cross-reference(s): 1  
 AB The isolated rabbit jugular and human umbilical veins respond to  
 bradykinin (BK) by contractions that are mediated by the BK B2 type  
 receptors. In this report, the pharmacol. of recently developed BK B2  
 receptor antagonists is assessed by using these preps. The nonpeptide  
 kinin antagonist WIN 64338 demonstrates competitive and surmountable  
 antagonism of BK in both the jugular and the umbilical veins (pA2 values  
 of 6.14 and 5.99, resp.). WIN 64338 shows selectivity in its antagonist  
 action as it does not inhibit the effect of various other contractile  
 agents in either of the preps. HOE-140, a "second generation" peptide  
 antagonist of BK, behaves as an insurmountable and irreversible antagonist  
 in the rabbit jugular vein, but appears to be competitive in the umbilical  
 vein (pA2 = 8.2). In the jugular vein, [L-Tic7]HOE-140 is an  
 insurmountable antagonist about 2000-fold less potent than HOE-140; the  
 L-Tic7 isomer demonstrates no significant antagonist activity on the  
 umbilical vein at 30  $\mu$ M. This study confirms that WIN 64338 behaves as  
 a competitive and selective kinin antagonist of the BK B2 type receptors.  
 The pharmacol. profile of the L-Tic7 analog of HOE-140 may provide useful  
 information in discerning the mol. interaction of noncompetitive BK  
 antagonists with their receptors.  
 ST venoconstrictor bradykinin B2 receptor antagonist  
 IT Receptors  
 RL: BIOL (Biological study)  
 (bradykinin B2, antagonists of, bradykinin-induced vein constriction in  
 response to, in human and laboratory animal)  
 IT Vein  
 (jugular, constriction of, by bradykinin, bradykinin B2 receptor  
 antagonist effect on)  
 IT Vein  
 (umbilical, constriction of, by bradykinin in human, bradykinin B2  
 receptor antagonist effect on)  
 IT 130308-48-4, HOE-140 151039-63-3, WIN 64338 153322-84-0,  
 [L-Tic7]HOE-140  
 RL: BIOL (Biological study)  
 (bradykinin-induced vein constriction inhibition by, in human and laboratory  
 animal, receptor B2 in)  
 IT 130308-48-4, HOE-140 151039-63-3, WIN 64338 153322-84-0,  
 [L-Tic7]HOE-140  
 RL: BIOL (Biological study)  
 (bradykinin-induced vein constriction inhibition by, in human and laboratory

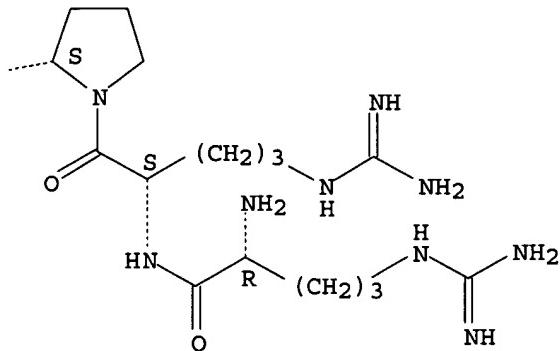
animal, receptor B2 in)  
 IT 153322-84-0, [L-Tic7]HOE-140  
 RL: BIOL (Biological study)  
 (bradykinin-induced vein constriction inhibition by, in human and laboratory  
 animal, receptor B2 in)  
 RN 153322-84-0 HCAPLUS  
 CN L-Arginine, D-arginyl-L-arginyl-L-prolyl-trans-4-hydroxy-L-prolylglycyl-3-  
 (2-thienyl)-L-alanyl-L-seryl-L-1,2,3,4-tetrahydro-3-isoquinolinecarbonyl-L-  
 (2 $\alpha$ ,3 $\alpha$ ,7 $\beta$ )-octahydro-1H-indole-2-carbonyl- (9CI) (CA)  
 INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

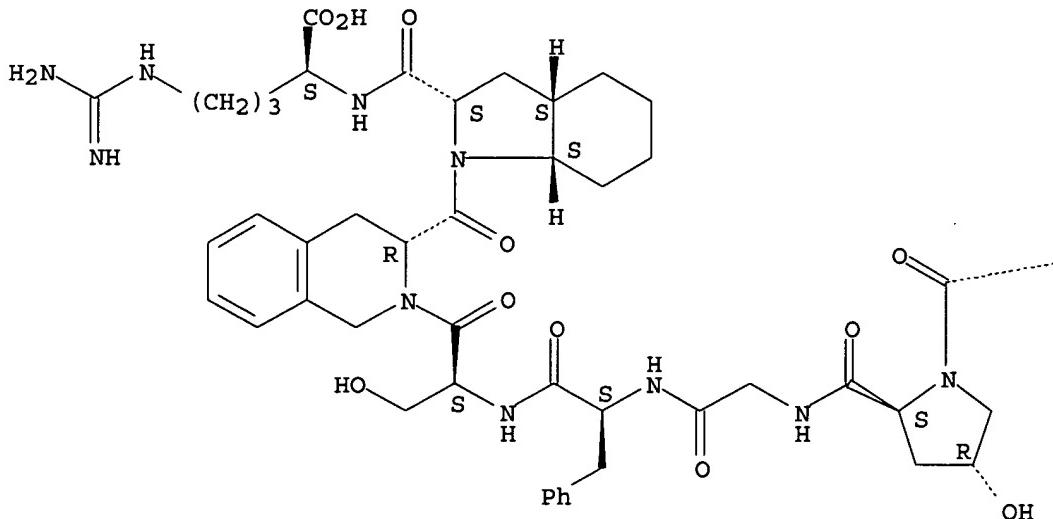


L29 ANSWER 12 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1994:290682 HCAPLUS  
 DN 120:290682  
 ED Entered STN: 11 Jun 1994  
 TI A Proposed Model of Bradykinin Bound to the Rat B2 Receptor and Its Utility for Drug Design  
 AU Kyle, Donald J.; Chakravarty, Sarvajit; Sinsko, Jacqueline A.; Stermann, Thomas M.  
 CS Scios Nova Inc., Baltimore, MD, 21224, USA  
 SO Journal of Medicinal Chemistry (1994), 37(9), 1347-54  
 CODEN: JMCMAR; ISSN: 0022-2623  
 DT Journal  
 LA English  
 CC 2-10 (Mammalian Hormones)  
 Section cross-reference(s): 34  
 AB A putative model of bradykinin bound to the rat B2 receptor was generated using a combination of homol. modeling (from the known transmembrane structure of bacteriorhodopsin), energy minimization, mol. dynamics, and a two-stage conformational search as a docking simulation. Overall, the proposed bound ligand adopts a twisted "S" shape, wherein a C-terminal β-turn is buried in the receptor just below the extracellular boundary of the cell membrane and the N-terminus is interacting with neg. charged residues in extracellular loop 3 of the receptor (most notably Asp268 and Asp286). Mutagenesis expts. describing mutations which result in both a loss of bradykinin affinity as well as those which have no effect on bradykinin affinity are in good agreement with the proposed structure. In short, the mutagenesis results and the computational simulations each point to the same region of the receptor as likely to bind bradykinin. A double mutation, predicted as being likely to have a dramatic effect on bradykinin binding affinity, was confirmed exptl., adding some validation to the proposed complex. Moreover, a new pseudopeptide bradykinin receptor antagonist (D-Arg0-Arg1-[12-aminododecanoyl]2-Ser3-D-Tic4-Oic5-Arg6) was designed on the basis of the model, and found to have good receptor affinity. Speculation regarding other possible sites for mutagenesis are also described.

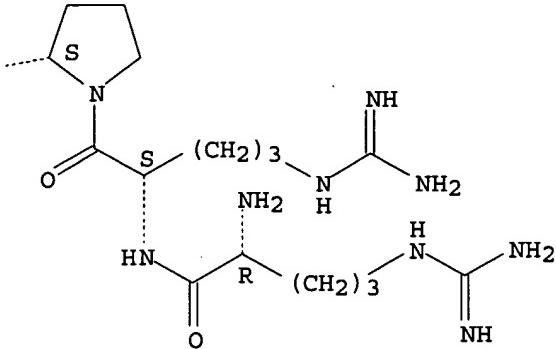
ST bradykinin receptor model antagonist; pseudopeptide bradykinin antagonist  
 IT Receptors  
 RL: BIOL (Biological study)  
 (bradykinin B2, bradykinin binding to, model for)  
 IT 130334-55-3P 154939-24-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and bradykinin antagonist activity of)  
 IT 130334-55-3P 154939-24-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and bradykinin antagonist activity of)  
 IT 130334-55-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and bradykinin antagonist activity of)  
 RN 130334-55-3 HCPLUS  
 CN Bradykinin, N<sub>2</sub>-D-arginyl-3-(trans-4-hydroxy-L-proline)-7-(D-1,2,3,4-tetrahydro-3-isoquinolinecarboxylic acid)-8-[L-(2 $\alpha$ ,3 $\alpha$ ,7 $\alpha$ )-octahydro-1H-indole-2-carboxylic acid]- (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L29 ANSWER 13 OF 21 HCPLUS COPYRIGHT 2005 ACS on STN  
 AN 1994:208607 HCPLUS  
 DN 120:208607  
 ED Entered STN: 30 Apr 1994  
 TI Bradykinin antagonists for the treatment of acute pancreatitis  
 IN Griesbacher, Thomas; Lembeck, Fred  
 PA Hoechst A.-G., Germany  
 SO Eur. Pat. Appl., 16 pp.  
 CODEN: EPXXDW

DT Patent

LA English

IC ICM C07K007-18

ICS A61K037-02

CC 1-9 (Pharmacology)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 548825	A1	19930630	EP 1992-121558	19921218 <--
	EP 548825	B1	19970507		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	AU 9230212	A1	19930624	AU 1992-30212	19921217 <--
	AU 662188	B2	19950824		
	CA 2085781	AA	19930622	CA 1992-2085781	19921218 <--
	CA 2085781	C	20030923		
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	BR 9205062	A	19930928	BR 1992-5062	19921218 <--
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	JP 3588472	B2	20041110		
	ZA 9209829	A	19940216	ZA 1992-9829	19921218 <--
	AT 152733	E	19970515	AT 1992-121558	19921218 <--
	ES 2101017	T3	19970701	ES 1992-121558	19921218 <--
	CN 1073603	A	19930630	CN 1992-114564	19921221 <--
	HU 63336	A2	19930830	HU 1992-4074	19921221 <--
	HU 214056	B	19971229		
	US 5670619	A	19970923	US 1994-232338	19940422 <--

PRAI EP 1991-122055 A 19911221 <--  
 US 1992-992096 B1 19921217 <--

## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES	
EP 548825	ICM	C07K007-18	
	ICS	A61K037-02	
EP 548825	ECLA	A61K038/04E	<--
US 5670619	NCL	530/314.000; 530/328.000	
	ECLA	A61K038/08	<--

OS MARPAT 120:208607

AB Bradykinin antagonists R1-A-B-C-E-F-G-J-K-R2 (R1 = H, C1-4 alkanoyl, optionally substituted by mercapto, hydroxyphenyl, (4-benzoyl)phenoxy, (4-benzoyl)benzoyl-Lys; A = D-Arg, D-Lys, a direct bond; B = Arg optionally substituted by NO<sub>2</sub> or toluol-4-sulfonyl, Lys optionally substituted by toluol-4-sulfonyl or CO-NH-C<sub>6</sub>H<sub>5</sub>, or a direct bond; C = Hyp-Pro-Gly, Pro-Hyp-Gly, Pro-Pro-Gly, dehydroPro-Hyp-Gly; E = Thi, Phe, Leu, Cha; F = Ser, Cys; G = D-Tic, D-Phe or D-Hyp substituted by C1-C4-alkoxy; J = Tic, Aoc, Oic; K = Arg, Ahx, direct bond; R2 is hydroxy or amino) and the physiol. tolerable salts thereof are used for the treatment of acute pancreatitis. The peptide H-D-Arg-Arg-Pro-Gly-Thi-Ser-D-Tic-Oic-Arg-OH was tested for its effects on exogenous bradykinin synthesis in rabbits and on exptl. pancreatitis in rats. The peptide at 3 nmol/kg completely inhibited the fall in blood pressure induced by kallikrein 10 nmol/kg or kallikrein 10 U/kg. Treatment of rats with the peptide inhibited the development of caerulein-induced pancreatic edema (Evans Blue assay) but did potentiate the release of pancreatic lipase and amylase into the serum, thereby allowing the enzyme to leave the tissue without hindrance and so lessen complications associated with it.

ST pancreatitis acute bradykinin antagonist peptide

IT Pancreas, disease

(acute pancreatitis, treatment of, bradykinin antagonist peptides for)

IT 130308-48-4 130308-49-5 130334-55-3 147267-10-5

147836-85-9 153986-61-9

RL: BIOL (Biological study)

(bradykinin antagonist, for treatment of acyte pancreatitis)

IT 130308-48-4 130308-49-5 130334-55-3 147267-10-5

147836-85-9 153986-61-9

RL: BIOL (Biological study)

(bradykinin antagonist, for treatment of acyte pancreatitis)

IT 130308-49-5 130334-55-3

RL: BIOL (Biological study)

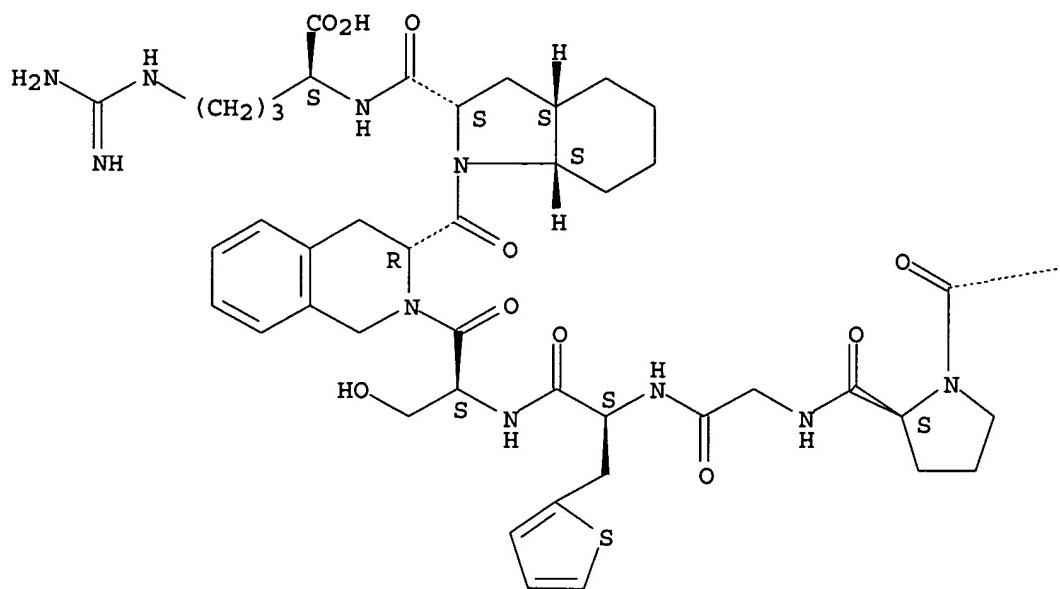
(bradykinin antagonist, for treatment of acyte pancreatitis)

RN 130308-49-5 HCPLUS

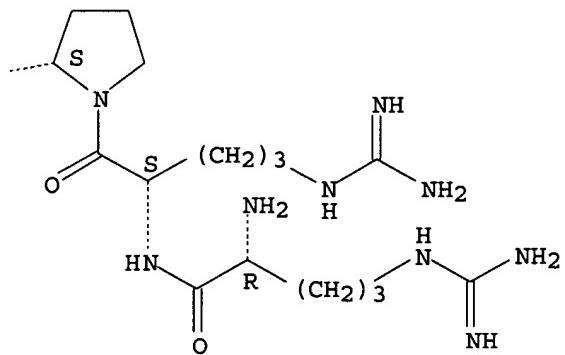
CN L-Arginine, D-arginyl-L-arginyl-L-prolyl-L-prolylglycyl-3-(2-thienyl)-L-alanyl-L-seryl-(3R)-1,2,3,4-tetrahydro-3-isoquinolinecarbonyl-(2S,3aS,7aS)-octahydro-1H-indole-2-carbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

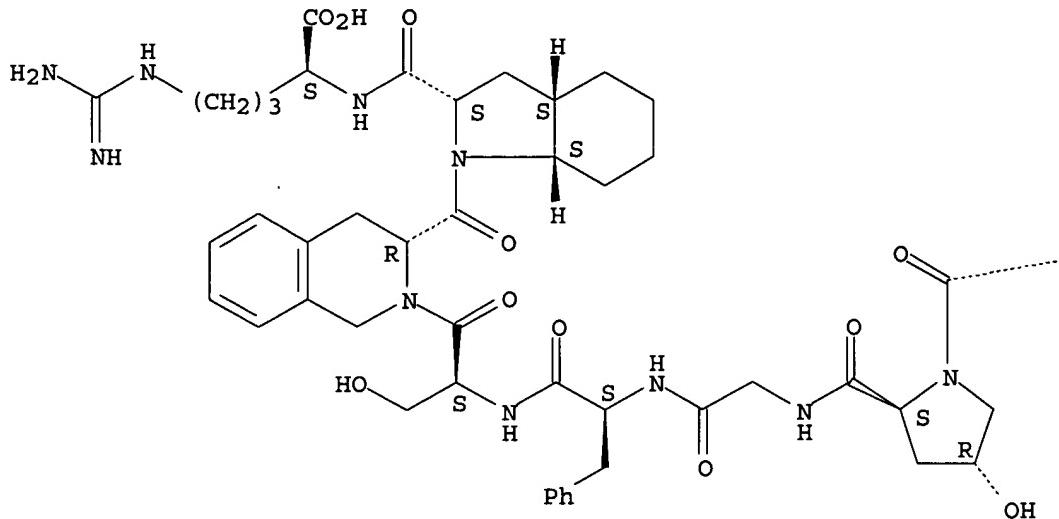


RN 130334-55-3 HCPLUS

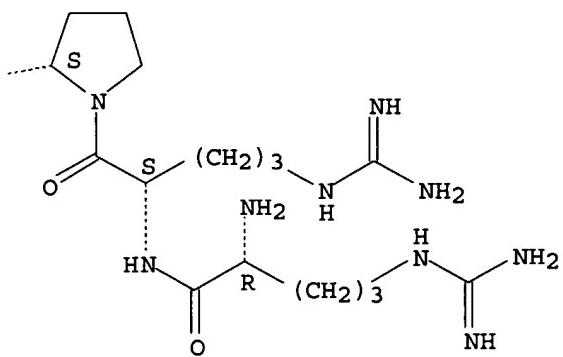
CN Bradykinin, N2-D-arginyl-3-(trans-4-hydroxy-L-proline)-7-(D-1,2,3,4-tetrahydro-3-isquinolinecarboxylic acid)-8-[L-(2 $\alpha$ ,3 $\alpha$ ,7 $\alpha$ )-octahydro-1H-indole-2-carboxylic acid]- (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L29 ANSWER 14 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1994:153920 HCAPLUS  
 DN 120:153920  
 ED Entered STN: 02 Apr 1994  
 TI Synthesis, Characterization, and Conformational Analysis of the D/L-Tic<sub>7</sub>  
 Stereoisomers of Bradykinin Receptor Antagonist D-Arg<sub>0</sub>[Hyp<sub>3</sub>,Thi<sub>5</sub>,D-  
 Tic<sub>7</sub>,Oic<sub>8</sub>]bradykinin  
 AU Sawutz, David G.; Salvino, Joseph M.; Seoane, Peter R.; Douty, Brent D.;  
 Houck, Wayne T.; Bobko, Mark A.; Doleman, Muriel S.; Dolle, Roland E.;  
 Wolfe, Henry R.

CS Department of Enzymology and Receptor Biochemistry, Sterling Winthrop Pharmaceuticals Research Division, Collegeville, PA, 19426, USA

SO Biochemistry (1994), 33(9), 2373-9  
CODEN: BICAW; ISSN: 0006-2960

DT Journal  
LA English  
CC 2-2 (Mammalian Hormones)  
Section cross-reference(s): 34

AB D-Arg<sub>0</sub>[Hyp<sub>3</sub>,Thi<sub>5</sub>,D-Tic<sub>7</sub>,Oic<sub>8</sub>]bradykinin (HOE-140) is a potent ( $K_i = 0.11$  nM) inhibitor of [<sup>3</sup>H]bradykinin binding to bradykinin B2 receptors found on human IMR-90 fetal lung fibroblasts. During the synthesis of this compound, the authors isolated and unambiguously identified the L-Tic<sub>7</sub> stereoisomer (WIN 65365), which exhibits a 2000-fold lower binding affinity ( $K_i = 130$  nM) than HOE-140 to the bradykinin receptor. A similar decrease in potency is observed for WIN 65365 inhibition of bradykinin-stimulated  $^{45}\text{Ca}^{2+}$  efflux from IMR-90 cells. Both HOE-140 and WIN 65365 appear to be competitive antagonists at the IMR-90 bradykinin receptor. This is the first documentation of bradykinin binding and functional antagonist activity by a bradykinin peptide analog with an L amino acid replacing Pro<sub>7</sub>. To rationalize the differences in binding affinities of HOE-140 and WIN 65365, a conformational anal. of the peptides was undertaken using annealed mol. dynamics (AMD). Conformational anal. of HOE-140 reveals a strong preference for the formation of a type II'  $\beta$ -turn in the carboxy-terminal region. Analogous modeling of WIN 65365 reveals that its conformation is strikingly different from HOE-140 in that the four carboxy-terminal residues of WIN 65365 do not form a  $\beta$ -turn. These differences in low-energy conformations between the two peptides may lead to a better understanding of the mol. interaction of antagonists with the bradykinin receptor.

ST bradykinin receptor antagonist; conformation WIN 65365 HOE 140

IT Lung, composition  
(bradykinin B2 receptors in, HOE-140 and WIN 65365 binding to, from human fetus)

IT Fibroblast  
(of lung, HOE-140 and WIN 65365 binding to bradykinin B2 receptors in, from human fetus)

IT Receptors  
RL: BIOL (Biological study)  
(bradykinin B2, HOE-140 and WIN 65365 binding to, in human fetal lung fibroblasts, conformation in relation to)

IT Molecular structure-biological activity relationship  
(bradykinin receptor-binding, of HOE-140 and WIN 65365, in human fetal lung fibroblasts)

IT Biological transport  
(efflux, of calcium, HOE-140 and WIN 65365 inhibition of bradykinin stimulation of, from human fetal lung fibroblasts)

IT Embryo  
(fetus, bradykinin B2 receptors in lung fibroblasts of, HOE-140 and WIN 65365 binding to, from human)

IT Conformation and Conformers  
( $\beta$ -turn, type II', of HOE-140 and WIN 65365, as bradykinin receptor antagonists)

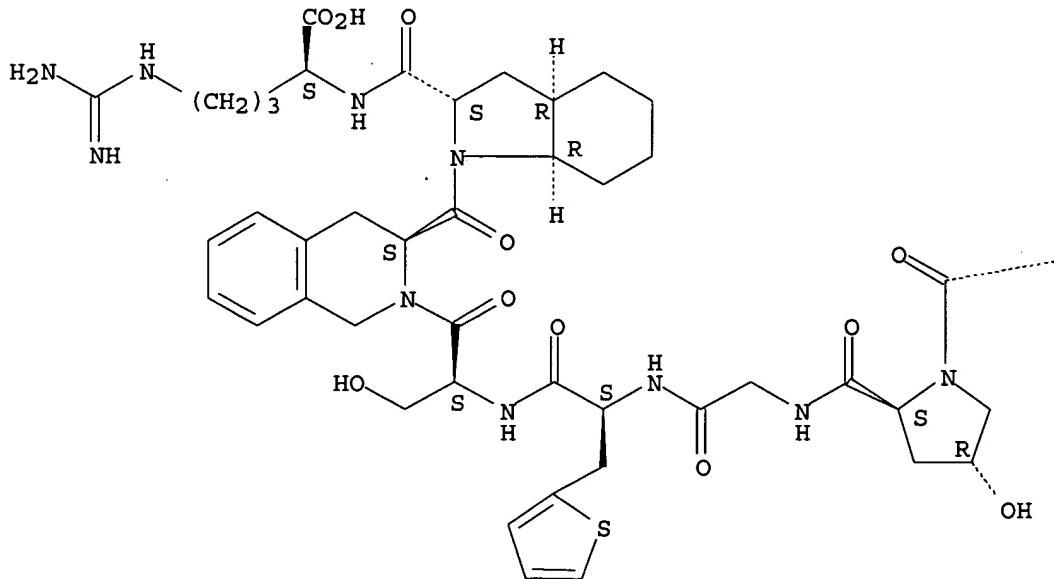
IT 97825-00-8, [D-Phe<sub>7</sub>]bradykinin  
RL: BIOL (Biological study)  
(binding of, to bradykinin B2 receptors from human fetal lung fibroblasts, HOE-140 and WIN 65365 in relation to)

IT 130308-48-4, HOE-140  
RL: PRP (Properties)  
(conformation of, as bradykinin B2 receptor antagonist in human fetal

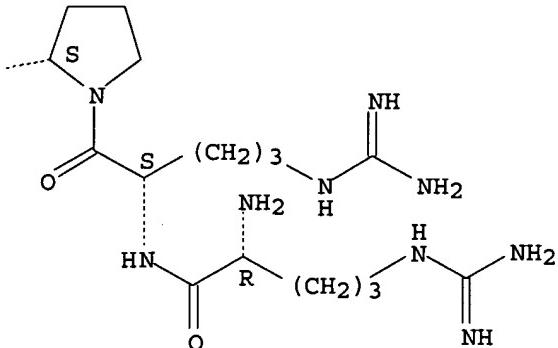
- lung fibroblasts)
- IT 7440-70-2, Calcium, biological studies  
 RL: BIOL (Biological study)  
 (efflux of, HOE-140 and WIN 65365 inhibition of bradykinin stimulation  
 of, from human fetal lung fibroblasts)
- IT 153322-84-0P, Win 65365  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and conformation of, as bradykinin B2 receptor antagonist in  
 human fetal lung fibroblasts)
- IT 153322-84-0P, Win 65365  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and conformation of, as bradykinin B2 receptor antagonist in  
 human fetal lung fibroblasts)
- IT 153322-84-0P, Win 65365  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and conformation of, as bradykinin B2 receptor antagonist in  
 human fetal lung fibroblasts)
- RN 153322-84-0 HCPLUS
- CN L-Arginine, D-arginyl-L-arginyl-L-prolyl-trans-4-hydroxy-L-prolylglycyl-3-  
 (2-thienyl)-L-alanyl-L-seryl-L-1,2,3,4-tetrahydro-3-isoquinolinecarbonyl-L-  
 (2 $\alpha$ ,3 $\alpha$  $\beta$ ,7 $\alpha$  $\beta$ )-octahydro-1H-indole-2-carbonyl- (9CI) (CA  
 INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L29 ANSWER 15 OF 21 HCPLUS COPYRIGHT 2005 ACS on STN  
 AN 1993:650452 HCPLUS  
 DN 119:250452  
 ED Entered STN: 11 Dec 1993  
 TI Design of potent, cyclic peptide bradykinin receptor antagonists from conformationally constrained linear peptides  
 AU Chakravarty, Sarvajit; Wilkins, Deidre; Kyle, Donald J.  
 CS Scios Nova Inc., Baltimore, MD, 21224, USA  
 SO Journal of Medicinal Chemistry (1993), 36(17), 2569-71  
 CODEN: JMCMAR; ISSN: 0022-2623  
 DT Journal  
 LA English  
 CC 34-3 (Amino Acids, Peptides, and Proteins)  
 Section cross-reference(s): 1  
 AB Beginning with a prototypical second generation peptide bradykinin receptor antagonist, D-Arg0-Arg1-Pro2-Hyp3-Gly4-Phe5-Ser6-D-Tic7-Oic8-Arg9 (I), a series of backbone-constrained analogs were prepared. Specifically, N- and/or C $\alpha$ -Me substitution was made either to Gly4, Phe5, or both. With the exception of D-Arg0-Arg1-Pro2-Hyp3-Gly4-[C $\alpha$ -methyl]Phe5-Ser6-D-Tic7-Oic8-Arg9 (II), all of these constrained peptides lost affinity for the receptor by at least 1000-fold with respect to I. II however, had a Ki of 0.52 nM, which was only slightly less than that of I. This led to the conclusion that the  $\phi$ , $\psi$  backbone dihedral angles about Phe5 were likely close to -60°, -60° or kinked into a twist in the biol.-active form. To test this hypothesis, two cyclic peptides were prepared, D-Arg0-Arg1-Cys2-Pro3-Gly4-Cys5-Ser6-D-Tic7-Oic8-Arg9 and D-Arg0-Arg1-Cys2-Pro3-Gly4-Phe5-Cys6-D-Tic7-Oic8-Arg9. Each of these peptides were cyclized through their inherent two Cys side chain groups and had KIs against the B2 bradykinin receptor of 1.5 nM, and 14.8 nM, resp. These first examples of potent cyclic bradykinin receptor antagonists may ultimately provide insight into the biol.-active conformation(s) of related peptide antagonists via spectroscopic expts.  
 ST bradykinin antagonist cyclic peptide  
 IT Receptors  
 RL: RCT (Reactant); RACT (Reactant or reagent)

(bradykinin, antagonists, cyclic peptides)

IT Peptides, preparation  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(cyclo-, preparation as bradykinin antagonists)

IT 130334-55-3  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(analogs, preparation as bradykinin antagonists)

IT 58-82-2, Bradykinin  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(antagonists, cyclic peptides)

IT 150629-59-7 150629-60-0 150629-61-1 150629-62-2 150629-63-3  
150629-64-4 150629-65-5 150629-66-6  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation as bradykinin antagonist)

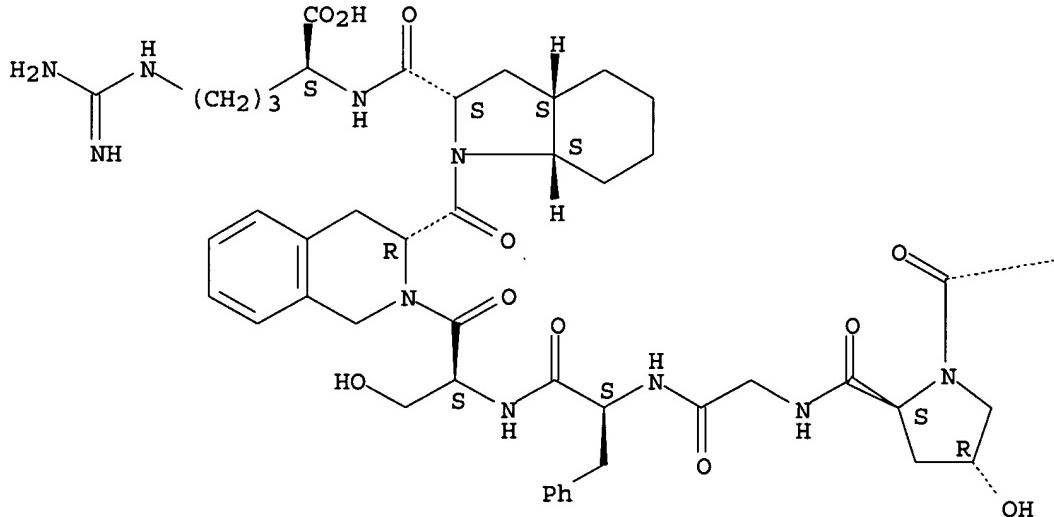
IT 130334-55-3  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(analogs, preparation as bradykinin antagonists)

RN 130334-55-3 HCAPLUS

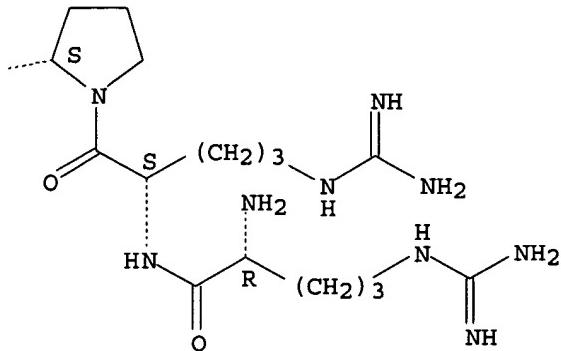
CN Bradykinin, N<sub>2</sub>-D-arginyl-3-(trans-4-hydroxy-L-proline)-7-(D-1,2,3,4-tetrahydro-3-isoquinolinecarboxylic acid)-8-[L-(2 $\alpha$ ,3 $\alpha$  $\beta$ ,7 $\alpha$  $\beta$ )-octahydro-1H-indole-2-carboxylic acid]- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

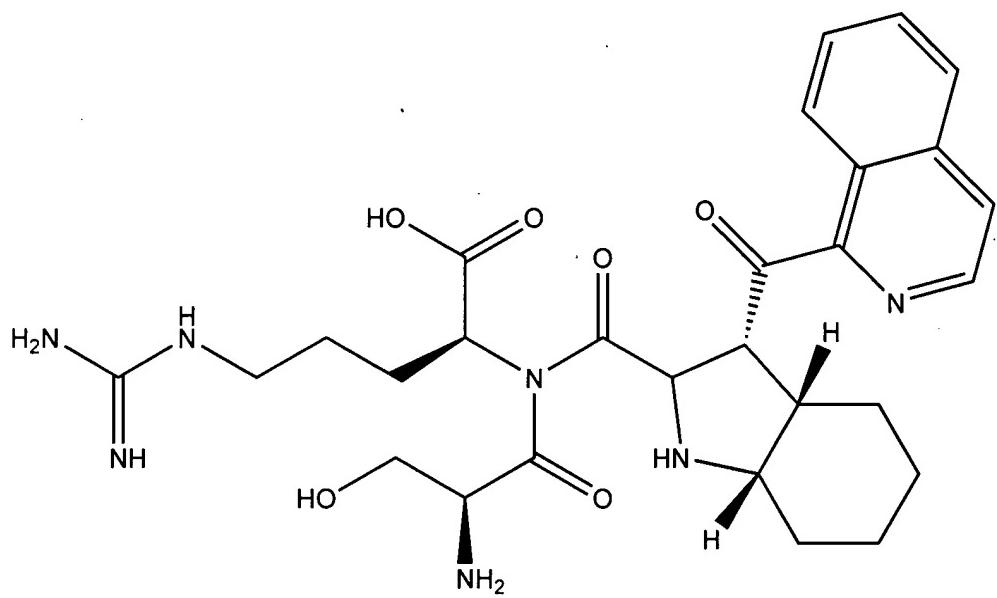
PAGE 1-A



PAGE 1-B



L29 ANSWER 16 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1993:620793 HCAPLUS  
 DN 119:220793  
 ED Entered STN: 27 Nov 1993  
 TI Chirality determinations of D- and L-amino acids of synthetic and naturally occurring peptides  
 AU Purcell, Brenda L.; Doleman, Muriel S.  
 CS Pharm. Res. Div., Sterling Winthrop, Great Valley, PA, 19355, USA  
 SO Tech. Protein Chem. IV, [Pap. Protein Soc. Symp.], 6th (1993), Meeting Date 1992, 315-21. Editor(s): Angeletti, Ruth Hogue. Publisher: Academic, San Diego, Calif.  
 CODEN: 59INA3  
 DT Conference  
 LA English  
 CC 9-3 (Biochemical Methods)  
 Section cross-reference(s): 2, 34  
 AB Reversed phase HPLC was used for separating hydrolyzed peptide derivatized with the chiral reagent 1-fluoro-2,4-dinitrophenyl-5-L-alanine amide (Marfey's reagent). Synthetic peptide Woc-114-108 was used as an example.  
 ST peptide amino acid HPLC; Marfey reagent peptide HPLC; liq chromatog peptide Marfey reagent  
 IT Amino acids, analysis  
 Peptides, analysis  
 RL: ANST (Analytical study)  
 (separation of, by reversed-phase-HPLC, chirality determination with Marfey reagent)  
 IT Chromatography, column and liquid  
 (high-performance reversed-phase, for amino acid and peptide separation, chirality determination with Marfey's reagent in)  
 IT 95713-52-3, Marfey's reagent  
 RL: ANST (Analytical study)  
 (in amino acid chirality determination of hydrolyzed peptides)  
 IT 95713-52-3, Marfey's reagent  
 RL: ANST (Analytical study)  
 (in amino acid chirality determination of hydrolyzed peptides)

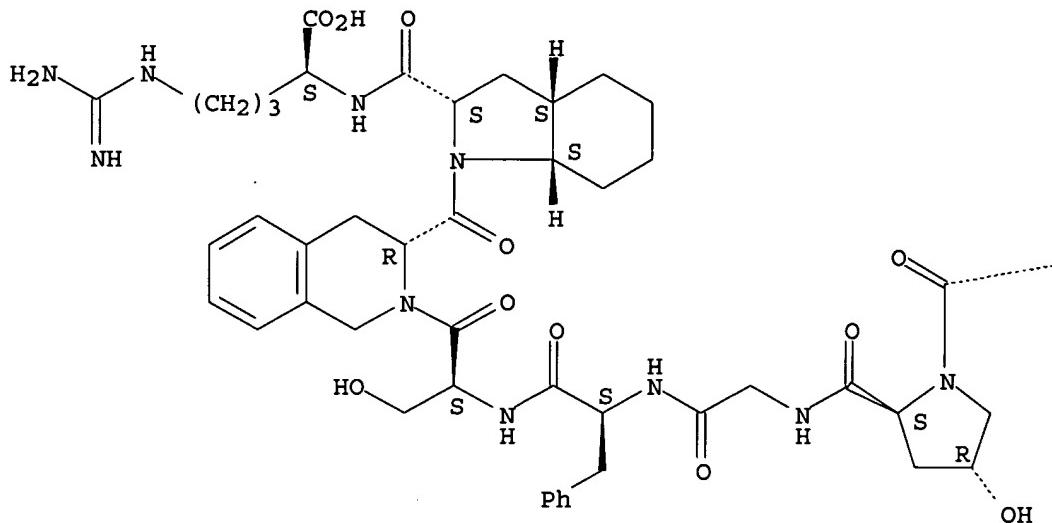


L-seryl-(3R)-1,2,3,4-tetrahydro-3-isoquinolinecarbonyl-(2S,3aS,7aS)-octahydro-1H-indole-2-carbonyl-L-arginine

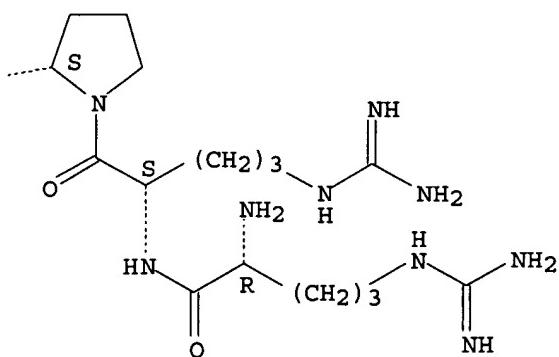
L29 ANSWER 17 OF 21 HCPLUS COPYRIGHT 2005 ACS on STN  
AN 1993:441697 HCPLUS  
DN 119:41697  
ED Entered STN: 07 Aug 1993  
TI Lack of significant unspecific effects of HOE 140 and other novel  
bradykinin antagonists in vitro and in vivo  
AU Lembeck, F.; Griesbacher, T.; Legat, F. J.  
CS Dep. Exp. Clin. Pharmacol., Univ. Graz, Graz, A-8010, Australia  
SO Agents and Actions Supplements (1992), (2, Recent Prog. Kinins:  
Pharmacol. Clin. Aspects Kallikrein-Kinin Syst., Pt. 1), 414-22  
CODEN: AASUDJ; ISSN: 0379-0363  
DT Journal  
LA English  
CC 2-10 (Mammalian Hormones)  
Section cross-reference(s): 1  
AB The novel, potent and long-acting bradykinin (BK) antagonists, HOE 140 and  
related compds., slightly decreased blood pressure, but did not affect  
heart rate and respiration of rats. The antagonists did not cause  
bronchoconstriction in guinea pigs. Neither HOE 140 nor BK released  
histamine from isolated perfused hindlegs of rats. The lack of  
significant unspecific side effects of the novel antagonists of EDs will  
further increase the usefulness of these compds. for exptl. and  
therapeutic purposes.  
ST HOE 140 bradykinin antagonist  
IT 130308-48-4, HOE 140 130334-55-3 140695-51-8.  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
study, unclassified); BIOL (Biological study)  
(as bradykinin antagonist, side effects of)  
IT 130334-55-3  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
study, unclassified); BIOL (Biological study)  
(as bradykinin antagonist, side effects of)  
RN 130334-55-3 HCPLUS  
CN Bradykinin, N<sup>2</sup>-D-arginyl-3-(trans-4-hydroxy-L-proline)-7-(D-1,2,3,4-  
tetrahydro-3-isoquinolinecarboxylic acid)-8-[L-  
(2 $\alpha$ ,3 $\alpha$ ,7 $\alpha$ )-octahydro-1H-indole-2-carboxylic acid] - (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L29 ANSWER 18 OF 21 HCPLUS COPYRIGHT 2005 ACS on STN  
 AN 1993:261015 HCPLUS  
 DN 118:261015  
 ED Entered STN: 26 Jun 1993  
 TI Compositions for topical administration to the nose or the eyes containing  
 bradykinin antagonists  
 IN Seidel, Heinz Ruediger; Wirth, Klaus; Giessler, Norbert  
 PA Hoechst A.-G., Germany  
 SO Eur. Pat. Appl., 8 pp.  
 CODEN: EPXXDW

DT Patent  
 LA German  
 IC ICM C07K007-18  
 ICS A61K009-08  
 CC 63-6 (Pharmaceuticals)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 529499	A1	19930303	EP 1992-114145	19920819 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	HU 63060	A2	19930728	HU 1992-2690	19920819 <--
	CA 2076558	AA	19930223	CA 1992-2076558	19920821 <--
	NO 9203293	A	19930223	NO 1992-3293	19920821 <--
	AU 9221245	A1	19930225	AU 1992-21245	19920821 <--
	ZA 9206313	A	19930428	ZA 1992-6313	19920821 <--
	JP 05221873	A2	19930831	JP 1992-222337	19920821 <--
PRAI	DE 1991-4127738	A	19910822	<--	

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	EP 529499	ICM	C07K007-18
		ICS	A61K009-08

AB Bradykinin antagonists are formulated as drops, sprays, gels, and ointments for nasal and ophthalmic application. The comps., which are buffered and isotonized, comprise a solvent, a preservative, and optionally, a thickening agent or ointment base. A nasal spray comprised HOE-140 50.0, HAcO 6.2, NaAcO.3H<sub>2</sub>O 165.5, benzalkonium chloride 10.0, NaCl 835.0 mg, and H<sub>2</sub>O to 100 g.

ST bradykinin antagonist nasal ophthalmic prep

IT Pharmaceutical dosage forms  
 (ophthalmic, bradykinin antagonists-containing)

IT Pharmaceutical dosage forms  
 (sprays, nasal, bradykinin antagonists-containing)

IT 58-82-2, Bradykinin

RL: BIOL (Biological study)  
 (antagonists, formulation of, as nasal and ophthalmic preparation)

IT 130308-48-4 130308-49-5 130334-55-3 140695-51-8

147820-70-0 147836-85-9 147921-72-0

RL: BIOL (Biological study)  
 (bradykinin antagonist, formulation of, as nasal and ophthalmic preparation)

IT 130308-49-5 130334-55-3

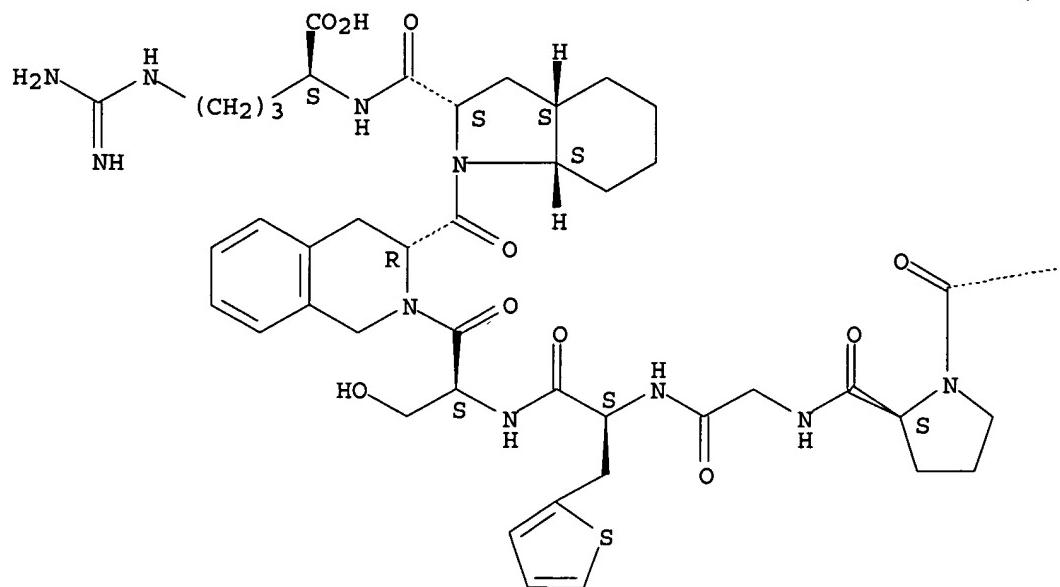
RL: BIOL (Biological study)  
 (bradykinin antagonist, formulation of, as nasal and ophthalmic preparation)

RN 130308-49-5 HCPLUS

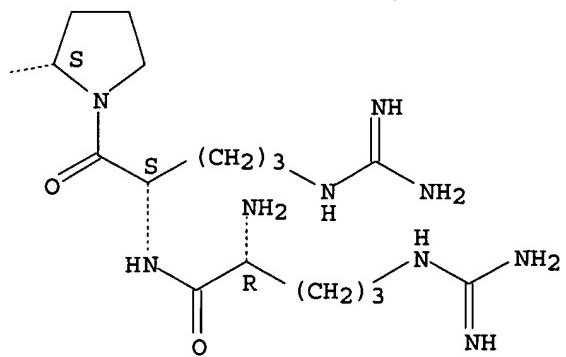
CN L-Arginine, D-arginyl-L-arginyl-L-prolyl-L-prolylglycyl-3-(2-thienyl)-L-alanyl-L-seryl-(3R)-1,2,3,4-tetrahydro-3-isoquinolinecarbonyl-(2S,3aS,7aS)-octahydro-1H-indole-2-carbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

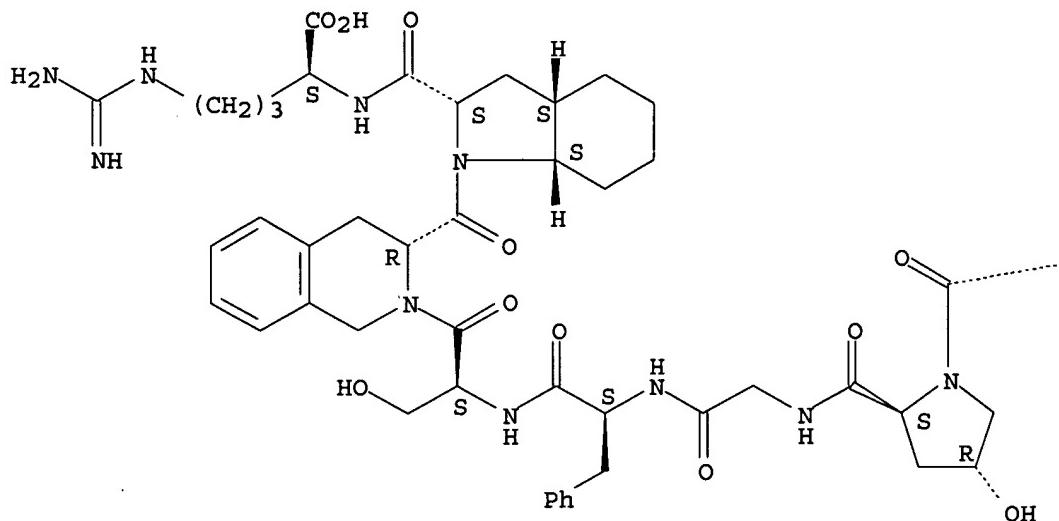


RN 130334-55-3 HCAPLUS

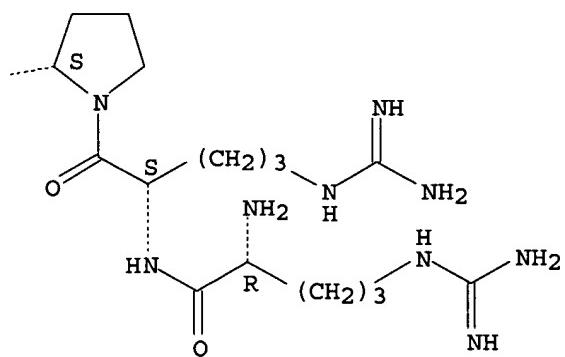
CN Bradykinin, N<sub>2</sub>-D-arginyl-3-(trans-4-hydroxy-L-proline)-7-(D-1,2,3,4-tetrahydro-3-isooquinolinecarboxylic acid)-8-[L-(2 $\alpha$ ,3 $\alpha$  $\beta$ ,7 $\alpha$  $\beta$ )-octahydro-1H-indole-2-carboxylic acid]- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

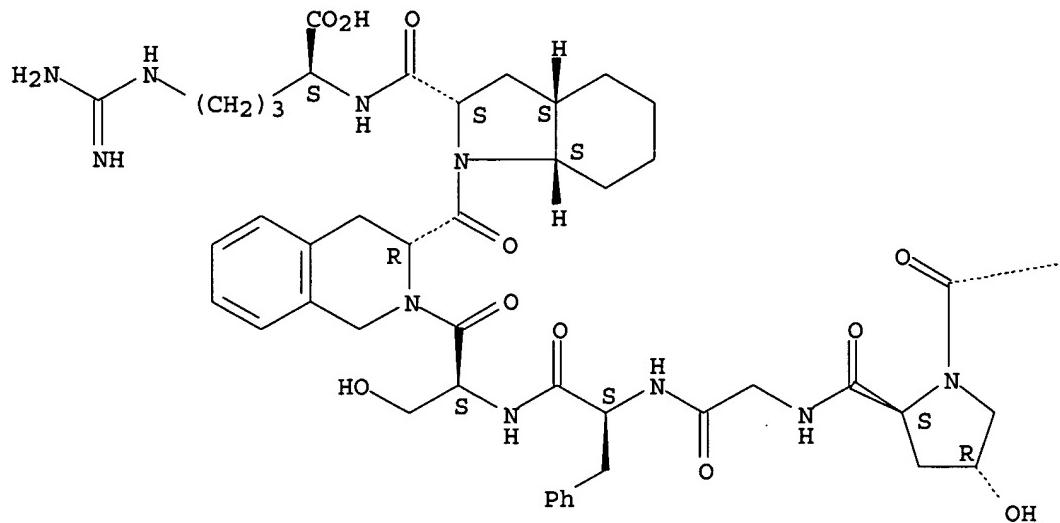


L29 ANSWER 19 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN  
AN 1992:188596 HCAPLUS  
DN 116:188596  
ED Entered STN: 16 May 1992  
TI Analysis of the antagonistic actions of HOE 140 and other novel bradykinin analogues on the guinea pig ileum  
AU Griesbacher, Thomas; Lembeck, Fred  
CS Clin. Pharmacol., Univ. Graz, Graz, A-8010, Austria  
SO European Journal of Pharmacology (1992), 211(3), 393-8  
CODEN: EJPHAZ; ISSN: 0014-2999

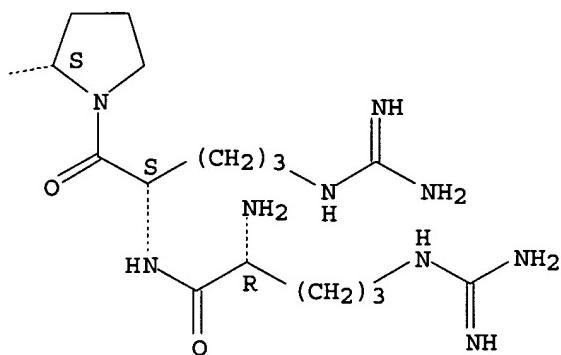
DT Journal  
 LA English  
 CC 2-10 (Mammalian Hormones)  
 AB The type of antagonism exhibited by three novel bradykinin (BK) antagonists, D-Arg-[Hyp3,Thi5,D-Tic7,Oic8]BK (HOE 140, I) D-Arg-{Hyp3,D-Tic7,Oic8}BK (II) and [Arg(Tos)1,Hyp3,Thi5,D-Tic7,Oic8]BK (III), was compared with that of a conventional antagonist, D-Arg-[Hyp2,Thi5,8,D-Phe7]BK (IV), on the guinea pig ileum. The novel compds. induced rightward displacements of cumulative concentration-response curves to BK, accompanied by a progressive reduction of the maximum effect (Emax)  
 without a significant decrease in the slope, whereas no reduction of Emax was observed with IV. Actions of substance P on the guinea pig ileum and of vasopressin on the rat uterus remained completely unaffected. It is concluded that as the novel BK analogs show competitive as well as non-competitive inhibition in the guinea pig ileum, but the inhibition is reversible and specific, they are dual antagonists.  
 ST bradykinin receptor antagonist ileum muscle HOE140  
 IT Receptors  
 RL: BIOL (Biological study)  
 (bradykinin, HOE 140 and other bradykinin analogs antagonism of, in ileum)  
 IT Intestine, composition  
 (ileum, bradykinin receptors of smooth muscle of, HOE 140 and other bradykinin analogs antagonism of)  
 IT 58-82-2D, Bradykinin, analogs 103412-42-6 130308-48-4, HOE 140  
**130334-55-3** 140695-51-8  
 RL: BIOL (Biological study)  
 (bradykinin antagonism with, in ileum, mechanism of)  
 IT **130334-55-3**  
 RL: BIOL (Biological study)  
 (bradykinin antagonism with, in ileum, mechanism of)  
 RN 130334-55-3 HCPLUS  
 CN Bradykinin, N2-D-arginyl-3-(trans-4-hydroxy-L-proline)-7-(D-1,2,3,4-tetrahydro-3-isoquinolinecarboxylic acid)-8-[L-(2 $\alpha$ ,3 $\alpha$  $\beta$ ,7 $\alpha$  $\beta$ )-octahydro-1H-indole-2-carboxylic acid]- (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L29 ANSWER 20 OF 21 HCPLUS COPYRIGHT 2005 ACS on STN  
 AN 1991:207831 HCPLUS  
 DN 114:207831  
 ED Entered STN: 31 May 1991  
 TI Preparation of H-D-Argpeptidylarginines and analogs as bradykinin antagonists  
 IN Henke, Stephan; Anagnostopoulos, Hinisto; Breipohl, Gerhard; Knolle, Jochen; Fehlhaber, Hans Wolfram; Stechl, Jens; Schoelkens, Berward  
 PA Hoechst A.-G., Germany  
 SO Ger. Offen., 26 pp.

CODEN: GWXXBX

DT Patent  
 LA German  
 IC ICM C07K007-18  
 ICS C07K007-06; A61K037-42  
 ICA C07K001-04; C07K001-06; C07K001-08; C07K001-10  
 CC 34-3 (Amino Acids, Peptides, and Proteins)  
 Section cross-reference(s): 1

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3938751	A1	19900531	DE 1989-3938751	19891121 <--
	DD 284030	A5	19901031	DD 1989-331416	19890802 <--
	DK 8903840	A	19900525	DK 1989-3840	19890804 <--
	DK 175344	B1	20040830		
	FI 8903738	A	19900525	FI 1989-3738	19890808 <--
	FI 94353	B	19950515		
	FI 94353	C	19950825		
	NO 8903193	A	19900525	NO 1989-3193	19890808 <--
	NO 177597	B	19950710		
	NO 177597	C	19951018		
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	AU 612054	B2	19910627		
	ZA 8906068	A	19910130	ZA 1989-6068	19890809 <--
	CA 1340667	A1	19990720	CA 1989-607853	19890809 <--
	IL 91298	A1	19940530	IL 1989-91298	19890811 <--
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	LT 3375	B	19950825	LT 1993-717	19930625 <--
PRAI	DE 1988-3839581	A1	19881124	<--	
	DE 1989-3916291	A1	19890519	<--	
	DE 1989-3918225	A1	19890603	<--	

## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
DE 3938751	ICM	C07K007-18
	ICS	C07K007-06; A61K037-42
	ICA	C07K001-04; C07K001-06; C07K001-08; C07K001-10
EP 370453	ECLA	C07K007/18
OS MARPAT 114:207831		<--
GI For diagram(s), see printed CA Issue.		
AB ABCEFK-(D)-TicGMF'-I [I; A = H, (un)substituted C1-8 alkyl, alkanoyl, alkoxy carbonyl, alkylsulfonyl, (un)substituted C3-8 cycloalkyl, carbamoyl, C6-12 aryl, C7-13 aryloyl, C3-9 heteroaryl, etc.; B = (un)substituted basic L- or D-amino acid residue; C = G'-G'-Gly, GNH(CH <sub>2</sub> ) <sub>n</sub> CO; G' = NR <sub>4</sub> CHR <sub>5</sub> CO; R <sub>4</sub> R <sub>5</sub> with the adjacent C and N atoms can form a heterocyclic		

ring system; n = 2-8; E = aromatic amino acid residue; F = bond, amino acid residue; K = bond, NH(CH<sub>2</sub>)xCO; x = 1-4; D-Tic = Q; G = G', bond; M = F; F' = F, NH(CH<sub>2</sub>)n, bond when G ≠ bond; I = OH, NH<sub>2</sub>, NHET] and their physiol. compatible salts, useful for the treatment of bradykinin-mediated pathol. states, e.g., wound, shock, burn, erythema, angina, arthritis, asthma, inflammations, hypotension, etc., were prepared by solid-phase peptide coupling. Approx. 160 I were prepared In an in vitro assay apprx.25 I inhibited bradykinin-induced contraction of guinea pig pulmonal artery tissue with IC<sub>50</sub> ranging from 2.6 + 10-5-4.2 + 10-9M.

ST	arginylpeptidylarginine prepн bradykinin antagonist; peptide prepн bradykinin antagonist; shock treatment arginylpeptidylarginine prepн; burning treatment arginylpeptidylarginine prepн; burning treatment arginylpeptidylarginine prepн; erythema treatment arginylpeptidylarginine prepн; angina treatment arginylpeptidylarginine prepн; arthritis treatment arginylpeptidylarginine prepн; asthma treatment arginylpeptidylarginine prepн				
IT	Peptides, preparation RL: SPN (Synthetic preparation); PREP (Preparation) (arginylpeptidylarginines, preparation of, as bradykinin antagonists)				
IT	Molecular structure-biological activity relationship (bradykinin receptor-binding, of arginylpeptidylarginines)				
IT	35737-10-1 71989-20-3 78603-12-0 88050-17-3 98930-01-9D, benzyloxybenzyl alc. resin-bound 108321-39-7 109434-27-7 114119-85-6 114119-87-8 114119-90-3 119831-72-0 130309-33-0 130309-34-1 130309-35-2 130309-36-3 130309-37-4				
IT	RL: RCT (Reactant); RACT (Reactant or reagent) (peptide coupling of, in preparation of bradykinin antagonist)				
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RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
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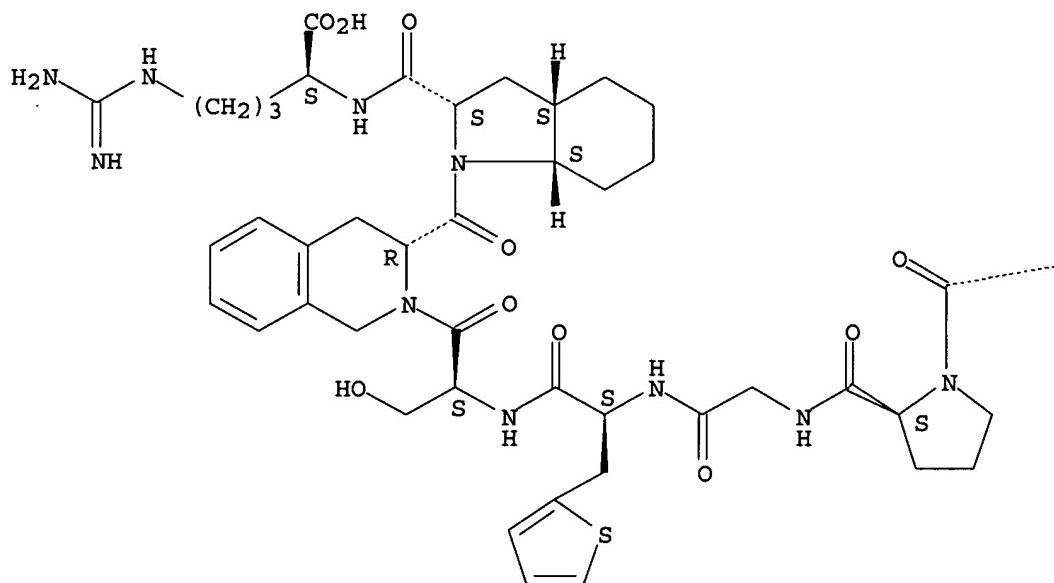
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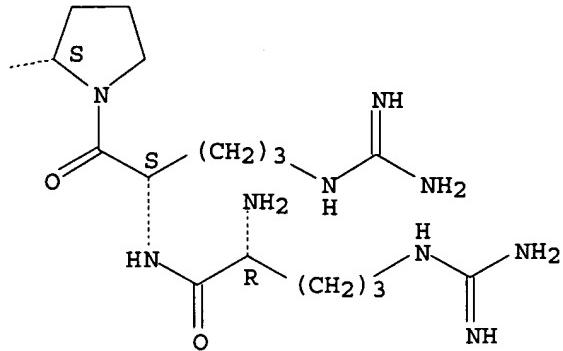
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Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

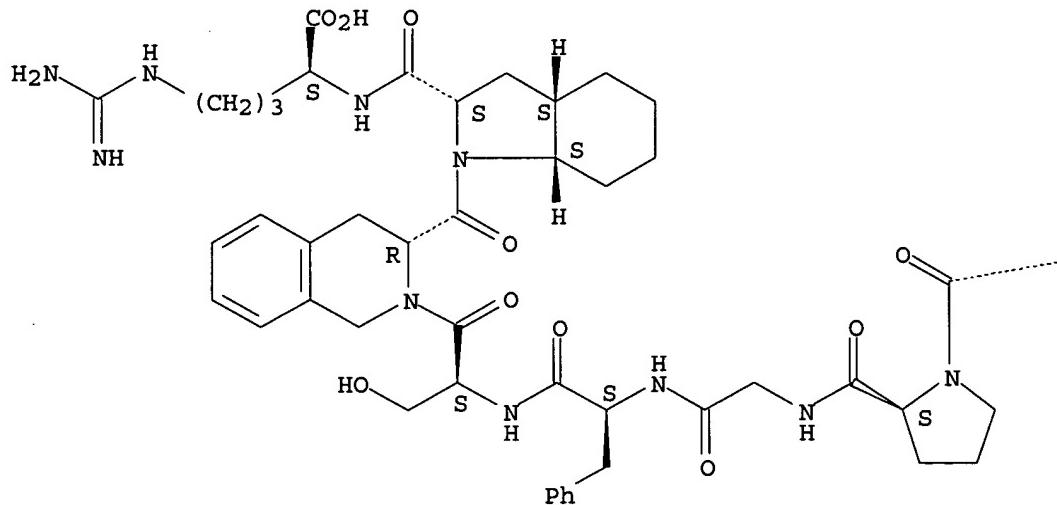


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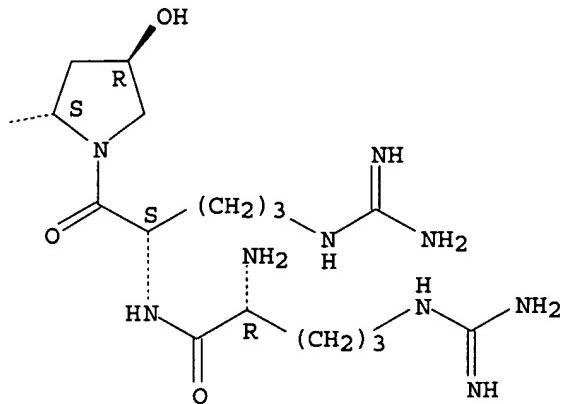
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Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

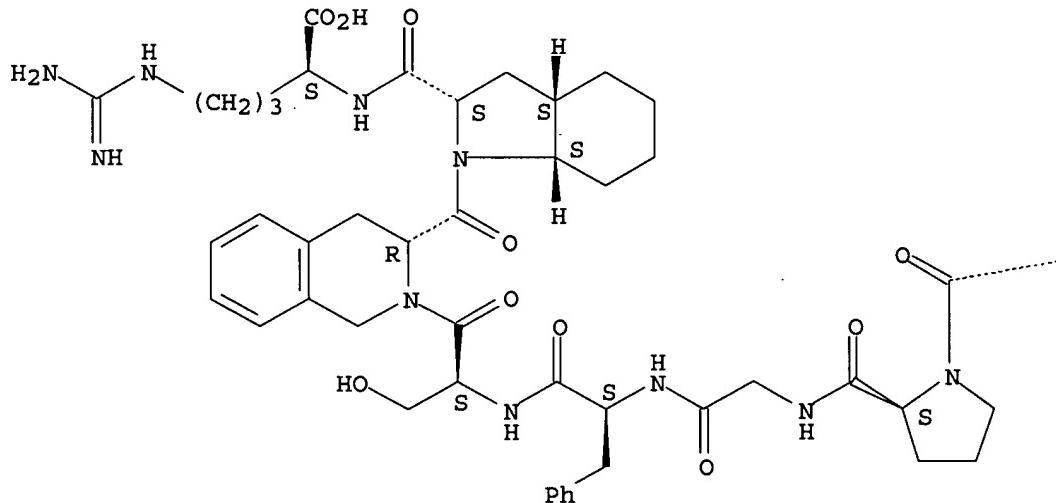


RN 130308-53-1 HCPLUS

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Absolute stereochemistry.

PAGE 1-A



<http://www.cas.org/ONLINE/DBSS/registryss.html>

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L31 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN  
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 (CA INDEX NAME)  
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 FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 10  
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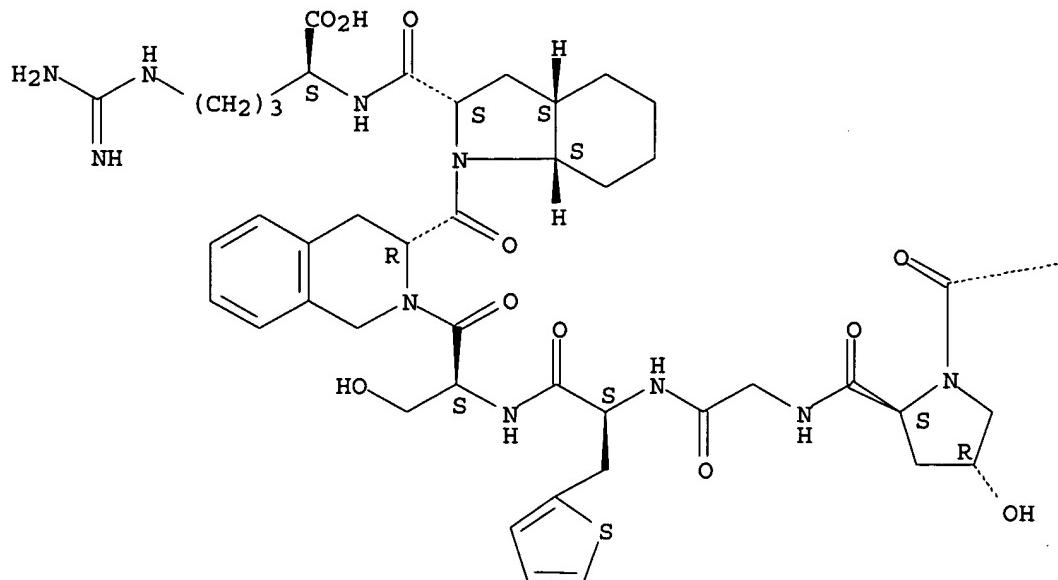
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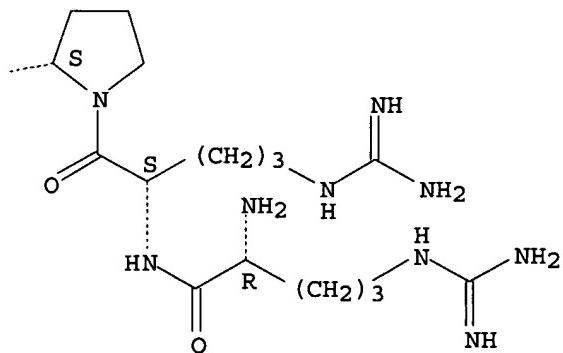
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 (\*File contains numerically searchable property data)  
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 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); MSC (Miscellaneous); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)  
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Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



119 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

119 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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REFERENCE 2: 143:90000

REFERENCE 3: 142:107809

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